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A Day in Dutchess.

The readers of the *Co. GENT.* may remember an article in its columns last year, (vol. v., p. 293,) containing details of a Sheep-shearing in Dutchess Co., and some notes in regard to the importations of Silesian and French Merinos, in which WM. CHAMBERLAIN, Esq., of Red Hook, has been for several years engaged in connection with Messrs. GEO. CAMPBELL of Vermont, and WM. H. LADD of Ohio. We were happy to avail ourselves of the opportunity of being present on a similar occasion on the 13th inst., and of obtaining some farther particulars which may be of service to the public.

The Sheep,

In Mr. Chamberlain's barns, are about 400 in number, including perhaps 100 lambs of from one to five months old,—the whole nearly equally divided between the Silesian and French breeds. Of the *French Merinos*, the first importation was made in 1851, when 86 ewes and 3 bucks were brought over. Two other lots of about 30 each, including both sexes, were procured in 1853 and '54. But as some inconvenience almost invariably results, where more than one kind is bred, Mr. C. intends disposing of the French at an early day, we believe, and devoting his attention to the Silesians entirely.

The first importation of the *Silesian Merinos* occurred in May 1851, and consisted of 40 ewes and 15 bucks. Another lot, of 31 in all, was brought over in September, 1853; a third, of 124, partly in May and partly in September, 1854, and, lastly, thirty-four ewes and two rams, had just arrived the preceding week, under the care of CARL, for several years Mr. Chamberlain's shepherd, who had been entrusted with their selection and purchase. All these importations were procured directly or indirectly from the flocks of Mr. FISCHER, of Werchenblatt, in Silesia; by whose father the breed was originally obtained from Spain as long ago as 1811, since which time,—and this is a noteworthy fact—they have been bred, by father and son, *altogether without* the intermixture of any other blood. This in-and-in breeding doubtless furnishes the reason why the Silesian parent is able to mark so strongly his offspring from the common ewes of the country,—which cross, in the opinion of Mr. Campbell and others, is the best

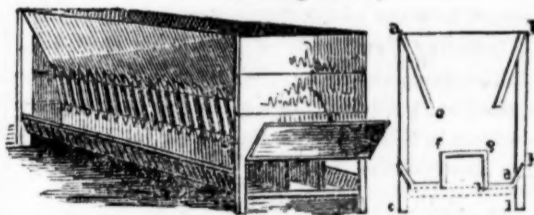
adapted for ordinary farm purposes, the lambs produced gaining greatly in fineness and value of fleece.

Where and How they are Wintered.

The cellars of Mr. Chamberlain's extensive out-buildings embrace an area of about 120 feet by 45,—a space which furnishes the most ample accommodations for his present number of sheep. They are well lit, and very warm, the walls being doubly boarded and filled in between with straw. The litter is allowed to accumulate all winter, not being removed until the sheep go out, but by the addition of straw for bedding, being kept as clean and sweet as the most fastidious could desire, while every particle of manure is preserved at the same time, and in the best manner. That the comfort and health of the flocks are also fully provided for by these means, is evidenced by the fact, that of the large number of lambs dropped through the season, from December into April, not one, born in a healthy condition, has been lost, or suffered from any subsequent cause,—while, in regard to economy, Mr. C. estimates that the food of 67 sheep without shelter, would suffice abundantly for 100 in his barns, thus effecting a saving of one-third. The sheep are taken into the yard twice daily for water and exercise.

Light and handy hurdles are employed to separate the sheep in pens, as being much more economical, convenient and tidy than the use of boards temporarily nailed to the timbers. We were much pleased also with

The Feeding Boxes,



No. 1.

No. 2.

Of which we have had the above cuts engraved, including as will be seen, a perspective view, (No. 1,) and a cross section (No. 2.) Constructed mainly of twelve-foot boards, nine inches in width, they are simple, inexpensive, saving of fodder and convenient in feeding and cleaning. The height is four feet; width 34 inches; slanting sides (represented in the section at *a.e.*) 18 inches broad; width of aperture (*e.f.*) to the bottom of

the hopper, 12 inches, across which inch slats are nailed, 3 inches apart in the clear, and having their ends chamfered so as to be fastened neatly and securely to the slanting sides above and the perpendicular boards below, which form the backs of the troughs. A board 9 inches wide, forms the bottom of the hopper (*f. g.*;) another like it is used for the bottom, (*h. d.*) and a third for the back (*g. h.*) of each trough,—the front of which is formed as will be seen in the section, of a slanting board, 4 inches wide, and its bottom raised six inches above the floor. The four corner posts, on which the ends are nailed, are bevelled at the top to secure additional strength in the slanting sides of the hopper, while the lid at the lower part of the end, which is seen open, is more a matter of convenience in brushing out the contents of the trough, than of absolute necessity.

The hay or straw put into the top of the box is drawn through the slats by the sheep, while all the seeds and chaff fall into the troughs, so that there is no possibility of the slightest waste, while the troughs furnish also every needed facility for feeding grain and cut roots.

The Feed.

Mr. Chamberlain, like many of the best English farmers, is beginning to doubt whether he can afford to grow hay as feed for his stock. He has given more attention to the production of beets than any other root crop, and has a variety, the seed of which was bought for Mangel Wurzel, but which turned out to be something else, although he is inclined to give it the preference to the genuine article. He can raise enough on one acre to feed five cattle, and his sheep and other stock thrive well on the beets and cut straw, with little or no hay.

Carl, the Shepherd.

To whom we have already referred, has proved an invaluable assistant. He was brought up at Mr. Fischer's, and first came to this country with the importation of 1853. He knows every individual sheep of the flock at sight, and has them under such excellent training that they follow at his call. He is assisted by one or two sheep-dogs, and on his recent visit to the *Faderland*, procured and imported another pair from a village on the Rhine. We mentioned last year the careful record he keeps of all the occurrences among his pets, including memoranda of every kind needed in the fullest sheep-biography. We were told one or two anecdotes, exemplifying both a great degree of careful shrewdness in this man, and the wonderful command he has acquired over the sheep.

The Shearing.

Four or five men were employed in shearing during the day, (May 13.) We present the following notes, which include the weights of both carcasses and fleeces:

SILESIAANS.

Breeding Carcass. Fleece.			
Ewes.	lbs.	lbs. oz.	
No. 125	74	8 12	It should be remembered that these ewes have suckled lambs since last December.
111	62	9 2	
179	71	8 8	
213	75	9 8	
326	65	8 9	

Yearling Carcass. Fleece.		
Ewes.	lbs.	lbs. oz.
No. 1	55	8
270	60	8 4
240	67	8 5
121	72	8 7
132	57	8 7

These ewes are all less than 11 months' growth of wool, as they were shorn the 20th of last June, shearing then upwards of 3 lbs. each, and wool sold at 50 cts. per lb.

Bucks. Carcass. Fleece.		
Bucks.	lbs.	lbs. oz.
No. 4	110	13 4

—He was of the last importation & his fleece of 11 mos. growth. —One year's growth.

Yearling Carcass. Fleece.		
Bucks.	lbs.	lbs. oz.
No. 275	64	8 6
68	74	8 8

Only 11 months' growth.

FRENCH MERINOS.

Yearling Carcass. Fleece.		
Ewes.	lbs.	lbs. oz.
No. 64	73	14
73	71	14 6
63	69	12 12
14	72	13 14
33	70	13 10

These are fleeces of seventeen months' growth.

Mr. Campbell thinks it safe to say that a flock of Silesian Merinos, well kept, and the wool well washed, would produce throughout an average of 5 lbs. per head. The above fleeces were none of them washed, but probably not so dirty as where the sheep are less tidily kept. Mr. C. promises to furnish us on his return to Vermont, with an account of the shearing of several half-bloods, in order to show the value of the cross.

Some Reclaimed Lands.

Mr. Chamberlain's farm embraces between four and five hundred acres, and was purchased by him 15 years ago in a very low and impoverished condition, having previously been occupied by tenants a number of years. About 25 acres of swamp lands have been reclaimed by him, and from being a decided nuisance, have now become fertile themselves, and a source of fertility for the remainder of the farm. The improvement cost him, from his want of knowledge of the best and cheapest modes, in the neighborhood of \$75 per acre, but with his present experience, could have been accomplished, he thinks, at about one-half this expense. But even this large outlay has been more than repaid as we shall see. He has no doubt that there are enough lands now lying waste in the one county of Dutchess, and which might be similarly reclaimed, to feed all the counties bordering upon the river!

The improvement was commenced by stone drains laid down in sufficient number to carry the water totally from the ground. The brush having next been cut away, a plow with steel point and coulter was employed to cut through the tussocks remaining, which were gathered into heaps, dried and burnt. On one portion of the land thus reclaimed, successive crops of corn have been raised for seven years, on another for five years. The latter, after this heavy cropping, was last year seeded, but the grass grown was so rank, that it was beaten down by the first storm, and made worthless for hay. The product of corn averaged during all these years, 80 bushels per acre, yielding, according to Mr. C.'s estimate, a clear profit every season of \$75—the full first cost of the improvement,—the corn-stalks, used as fodder, being considered an equivalent for the expense of cultivation.

The swamp now rates as the most productive ground in the county. Muck taken from it has proved an excellent dressing for uplands, good crops being obtained by its use, without any other manure. We were afterwards informed by Mr. Wainwright, that he is obliged to pay 37½ cents a-load for muck entirely similar, and of which, even at this cost, he makes extensive use.

Mr. C. derives much very valuable manure also, from his manner of wintering his sheep above described; though he has not yet carried it quite so far as they do in Germany, where the litter and manure is sometimes allowed to accumulate to a depth of four or five feet before removal. He had tried the experiment also during the past winter, with a portion of his cattle—keeping them well supplied with bedding on a ground floor,—and had found it certainly open to no objection on the score of *neatness*, as we are able to testify from personal observation.

Careful regard being thus paid to the home manufacture of manure, Mr. Chamberlain has been able to bring his whole farm from a very low to a high state of productiveness. Employing the beds of muck, and economizing all the accumulations from his sheep and other stock, it has never been necessary for him to go beyond his own establishment for its fertilizers; he never had used guano at all, with the exception of a small lot last season for purposes of experiment,—with which, indeed, he was so well satisfied, that he has this year procured a larger quantity for further trials,—yet, in the main, his system has been that, in which, in a word, consists the true doctrine of all profitable farming, viz: *reliance upon the resources of the farm for maintaining and increasing its fertility.*

An Implement or Two.

Our attention was called to a root-cutter, manufactured by Mr. Campbell at Westminster, Vt., and invented by H. A. Willard of that State. It *gouges* the roots into shavings of convenient size for feeding, and has been found to work entirely to the satisfaction of all concerned.

We will mention here an English machine employed by Mr. Wainwright,—Crosskill's Clod Crusher. It was made for him by the Buralls of Geneva, cost between \$50 and \$60, and had proved of great value in breaking up the lumps of clayey soil plowed when wet, and baked by the sun into masses too hard to be reduced by any other means. Mr. W. uses also Seymour's Broadcast Sower, which he had tried for his spring crops and also with grass seed and guano, and with the operation of which he expressed himself entirely satisfied.

Mr. Wainwright's Place and Stock.

In the afternoon we proceeded with several other gentlemen to visit The Meadows, the residence of C. S. WAINWRIGHT, Esq., who has been engaged for nearly ten years in various improvements upon it. The house is a very tasteful structure of stone, not of unusual size, but substantial, and in good keeping with a well-chosen site. From the front there is a delightful river

view, following its course to the northward ten to fifteen miles, and embracing along the horizon, the highest peaks of the Catskills. Beneath the brow of the hill the railroad lies concealed, and the trains go by almost unheard. The smooth water, beyond, affords a beautiful perspective, studded with the sails of the silently moving river craft,—noiseless evidences of industry and life, as much more picturesque in a landscape than the blustering vehicles of steam, as they are of less practical importance and pretending mien. Add to this scenery yonder, a well shaven lawn under foot, with now and then on either hand a flower-bed gracefully embraced amidst the turf, here a clustered and variegated mass of early pansies, not very far away a bending knoll green with the young wheat,—not to speak of a smooth road curving off to well-filled stalls in the unseen distance,—and you can, perhaps, imagine a picture which, to say the least, is very pleasant indeed for a city man to wake up in of a fine May morning.

At the stable we find Mr. W.'s herd of Devons, about 30 in number besides calves, and peculiarly fortunate in including several winners of high prizes, both in this country and abroad. "May-Boy" is the principal bull at present. He was calved in 1850, bred by Mr. George Turner, of "Barton," near Exeter, England, and imported by Messrs. W. P. & C. S. Wainwright in 1851. His sire, "Duke of York," obtained two first prizes at Shows of Royal Ag. Society, respectively as a yearling and an aged bull, while his granddam, "Old Mayflower," and two full sisters, were also winners at Royal Shows. May-Boy himself has had first prizes at Am. Institute, N. Y. State and U. S. Ag. Society Exhibitions. "Omar Pasha," who is growing up eventually to succeed him, was also bred by Mr. Turner, having been calved in the spring of 1854, and was imported by Mr. W. during the season of 1855—at the Carlisle Show of the Royal Ag. Society held in which year, he had taken the first prize as best yearling bull. The females of the herd comprise among others, "Nonpareil," of the first importation of the Messrs. W. in company, and now 13 years old; "Kate Kearney," imported in 1853, a favorite animal; "Daisy," brought over in 1855, and since the mother of a bull-calf sired before leaving England by "Napoleon," the taker of the first prize in his class at Carlisle,—all fine specimens of this valuable breed. They were looking very well, and its admirers can but be amply repaid for a visit. Mr. W.'s Essex Pigs are also worthy of note.

Peaches in New-Hampshire.

The two past winters have been hard customers to our peach trees, but still many of my trees will show a tolerable blossom, while others have the fruit buds killed entire. Some trees are more hardy than others. One thing is certain; it cannot be told by the fall of the mercury in the thermometer, the exact degree of cold required to kill the blossom-buds on the peach tree, in different winters. I have had them all destroyed when the mercury during the winter did not fall more than 10° or 12° below zero, while in another winter, the mercury went down to 18° at three different times, and yet I had a tolerable crop of peaches the autumn following. Much depends upon the ripening of the new growth of wood and buds in the autumn.

A Few Hours at Thornedale.

Among those who have selected the best, and bid the highest at celebrated English Short-Horn and South-Down sales for the past few years, are eminent the names of JONATHAN and SAMUEL THORNE, Esqs., father and son, of Dutchess Co., in this State. The stock thus collected has of late passed entirely into the hands of Mr. T., Jr., who has devoted himself to breeding, in the hope and with the intention of making it a permanent pursuit, and of establishing here a herd which shall at least equal any to be found abroad. Attracted to this undertaking by a natural taste for high-bred animals, he enters upon it with the additional qualifications derived from repeated personal examinations of the best herds, and intercourse with the most successful breeders of England—attentive and earnest study of the subject, and the possession of an extensive farm excellently adapted to the end designed, and of the wealth necessary to avail himself of all means for promoting it. Under these circumstances it is not surprising that the fruits of his enterprise in importing, and skill in breeding, should be already visible about him in a collection of choice and beautiful animals, old and young, well able to bear the scrutiny of the most fastidious judge.

Let us first accompany our host to the pastures yonder. The cattle are now tasting the fresh grass for only the second time, and having passed the winter on hay alone, are not in as good condition to be shown, as they may be a few weeks hence. Here is 'Countess,' red and white, of Robt. Bell's breeding, and dam of the first prize yearling bull at the last Connecticut Show; here 'Mystery' and 'Constance,' roan, as is also 'Lady Barrington' under yonder trees; and there are 'Lady of Athol' and 'Dinah Gwynne,' both from Mr. Tanqueray's herd, one sired by 'Duke of Athol,' and the other by famous 'Balco,' whose junior we shall presently see. They are all marked by the softness of touch, fineness of coat, full and rounded carcasses, broad chests and well-squared backs, that pertain to general Short-Horn excellence. Before we go to the next pasture, we shall stop a moment on the brow of this hill, to look about us. Not steep, nor to appearances so very high, it commands a prospect far and near on every side, of great extent, and comprising some of the finest farming lands of the county. In nearly a square about us, are extended the five or six hundred acres that have descended in the Thorne family, since the days when they could be purchased at six dollars apiece, and by whom they have been tilled until their present name is fairly won and worn. Far away some forty or fifty miles, the Catskills are still in sight, and the 'Mountain House' is plainly visible without the aid of glass. So we take our way downward to another field.

'Duchess 64th,' of the famous blood which has commanded the highest prices on record,* is now before us, and probably one of its most perfect living representatives. She must rank the first of the many beautiful cows we have admired and are to see. Next after her, perhaps, is 'Frederica,' imported in 1853, when two years old, and having already taken five first prizes at Royal, Irish, and Shire Society Shows 'Aurora,' whose excellencies entitle her to nearly an equal rank, is a beautifully marked red and white, five years old, and 'Lallah Rookh,' six months younger, vies closely with her—imported when a yearling, she had already won two first prizes, and was purchased

at that age for \$2000. We cannot specify farther, though 'Diana Gwynne,' 'Peri,' 'Darling,' 'Agnes,' and others, seem waiting the compliments they well deserve.

Younger are the recipients of our third call, than any of their predecessors in examination, and we are referred to them as testing whether the character of Mr. Thorne's importations is likely to degenerate. Better witnesses to the contrary there could not be, than '1st Duchess of Thornedale' by 'Grand Duke,' out of Duchess 64th, now 18 months old, and a heifer to be proud of; 'Clover,' out of Countess by the same sire; 'Lady May' from a dam, 'Lady Millicent,'—whom we ought to have mentioned when we saw her a short time ago,—by 'Lord of Brawith'; 'Mistress Gwynne,' sired by Grand Duke, out of 'Mystery,' and who promises to prove a formidable rival, even for the first in our list. These would have no reason to shun a trial of merit with any stock of their age, now in the possession of English breeders, and they certainly give high promise of future successes to their enthusiastic owner.

We can but stop a moment to watch the fine action of a pair of colts in the next pasture—respectively of Black Hawk and Mambrino blood. Those Devon steers in the lane by the barns, are samples of five yoke employed on the farm, three of them of Connecticut breeding and training, and two from Otsego Co.; costing here about \$200 a pair, and destined in the end to be fatted for the butcher, at a good price. Now we come upon a pair of Jersey cows, imported with one or two others in September, 1854, and June, 1855, and kept merely for their milk. They are less ugly in appearance than most of their kind, and evidently prodigies for the dairy. Indeed, one of their number, brought over last summer, who had taken the Jersey Ag. Society's, and other first prizes, had made, according to the certificate required by its rules, *seventeen* pounds of butter in one week, and a trial by Mr. Thorne last winter, under unfavorable circumstances, and, as we understood, without extra keeping, resulted in a yield of nine and a half pounds for the same time. He intends to preserve a careful record of her daily product through the summer. We afterwards see her calf, looking more like a fawn than the offspring of a staid domestic animal, so tender and expressive are its eyes, so deer-like the markings and color of its coat, and the delicacy of its legs and hoofs.

On our way toward the barns, we look at the South Downs—a flock numbering thirty-two ewes, and with no less than *fifty-one* lambs accompanying them. They are all imported or their immediate descendants, and include several pens of high prize winners abroad. It would be difficult to point to so large a number, of greater uniform excellence, elsewhere. The 'model' ewe, presented to Mr. T. by Jonas Webb, as a specimen of a perfect South Down, is among them, nor by a great interval better than her companions. There are also in the yard near by, a number of wethers, whose mutton is esteemed a rare delicacy and commands the highest prices. The ram, '112,' the sire of most of the young sheep, is the one purchased for \$650 in 1853, at Mr. Webb's annual letting.

We come now to the bulls, and first among them is 'Grand Duke' (10,284.) The price paid for him (\$5000) is well known. He had the misfortune some time since, as may be remembered, to meet with an accident, entirely incapacitating him for service, and from which it is not likely that he will ever recover, having at the time sired but six or seven calves. Of these 'Royal Duke,' out of Frederica, was the one whose sale to JAS. B. CLAY, of Ky., was noticed in our paper a few weeks since. The amount paid was \$2000. To take the place of Grand Duke, 'Neptune' and 'Second Grand Duke' were imported last fall—the latter costing the same sum paid for Grand Duke in 1853. They are splendid animals, the former of a noted prize-winning family, while the latter, not yet

* At the sale of Lord Ducie's herd in 1853, 'Duchess 64th' was bid off by Mr. Thorne at the price of \$3000.

quite three years old, promises to do ample credit to his long line of 'Duchess' ancestry. He is marked by great length of body, and will soon come into possession of all the majestic size and carriage of Grand Duke the first, whose excellent quality, broad chest, muscular neck, full crops and flanks, he already rivals. 'Young Balco,' the sire of much of Mr. Thorne's young stock, is another celebrated bull—sired in England by 'Balco,' but born after his arrival here, and with several of his relatives owned in different parts of the country, ranking with the best of our imported Durhams. Among his male offspring of Mr. T.'s breeding, worthy of particular note, are 'Don Juan,' from Darling, herself sired by Grand Duke, and 'Tom Moore' out of 'Lallah Rookh.' Several heifers which we now see for the first time, should also be noticed—among them '2d Duchess of Thornedale,' and Grand Duke's last calf, 'Peerless,' out of 'Peri.' It may be stated that Grand Duke Second, and the 'Duke of Dorset,' who has recently been purchased by Mr. T., and is soon expected to arrive, were the last remaining of the Duchess blood in England. We do not see but the scale of importation must presently be turned the other way, and at that time, if not before, we trust his taste for and skill in conducting the pursuit, will fully rank our friend as a breeder of Short-Horn cattle and South-Down sheep, with BATES of Kirkleavington, and WEBB of Babraham.

In going, we may note one or two outbuildings near the house, which form a great luxury and convenience. One is a cold grapery—an inexpensive, but very considerable addition to any country place, and which, nevertheless, strange to say, is very seldom found. It was constructed, we were told, entirely from the directions given in Chorlton's handbook. The vines were apparently in a very thrifty condition. Another is an ice-house, filled from a fish-pond near at hand,—a building which must eventually find its way to almost every farm. The one before us is constructed with quite a space all around between its double walls, affording a great deal of excellent storage for provisions of different kinds.

Thus, after several very pleasant hours at "Thornedale," we return to Poughkeepsie—fourteen miles, over an excellent turnpike road, which should not fail to be commended. It is a beautiful drive for a spring morning, skirted on both sides with land which it would be almost sport to plow,—except, indeed, now and then, where the firm old foundations of Dutchess crop out rather too prominently, and the little boulders, telling of ancient floods, are somewhat too thickly scattered for any farming, but the most frugal and the best.

Notes Editorial—A Grand-Island Farm.

At the head of Grand Island, washed on three sides by the waters of Niagara, lie a thousand acres of almost virgin soil, belonging to LEWIS F. ALLEN, Esq. It is a fine position, commanding a view above of the city of Buffalo, and as a back-ground, quite a range of hills, distant twenty-five to thirty miles; opposite on the westward, a good farming country under Her Majesty's dominion, and below on both sides the pleasant river scenery, as it bends around between the islands and opposite shores. Mr. A.'s farm also embraces Beaver Island, a pocket edition of the other, and separated from it by a little creek of only a few yards width,—like all Niagara in being of the purest and bluest water, and an especially favorite haunt of the various river fish. The last day of spring we spent in a pleasant ramble on Mr. Allen's premises, to which the only drawback was the coldness of the weather. The wind, which is remarkably fond of following its

own listings along the whole range of lakes, by no means becomes more tractable between Buffalo and the Falls; and it seemed anxious to greet us with some peculiar demonstrations, capping the fresh-water waves with white, and sweeping the American shore with all the passion it might feel if it was in faithful alliance with the Canadas and the two countries were actually at war. It is something, though, to be where the air *can* circulate, and in summer nothing can be more refreshing than the breezes from these inland seas.

Mr. Allen is so well known as one of the leading agriculturists of this State, and editor of the American Herd-Book, as well as by other valuable contributions to our rural literature, that we are sure the imperfection of a few notes taken at his farm cannot prevent their possessing some degree of interest to the farming public. He has only been engaged about eight years in clearing it up, and in the neighborhood of 300 acres are still under a heavy growth of timber. One hundred and fifty or two hundred are in meadow; much of the remainder in pasture, and the balance chiefly occupied by considerable orchards, apple, peach and pear.

The Meadow Land.

Mr. A.'s farm is well adapted for stock-growing purposes, to which it is now mainly devoted. The meadows are almost on an unbroken level, though not so entirely as to obstruct drainage,—furnishing thus fine ground for the operation of a mowing machine, which it is designed to put to a thorough test during the present season. The stumps of the old trees are slowly and surely yielding to the influences of time, and will soon entirely disappear. The yield averages in fair seasons, we understood, a ton and a half to the acre. Some portions never plowed, are considered nearly if not quite as productive as the rest. Mr. A. is by degrees seeding it all down, putting in wheat or oats with the first year's growth of grass and clover. The crop is now promising finely, as we believe it is, indeed, generally through the State and elsewhere.

A very remarkable fact connected with the depredations committed by mice the past winter, on fruit and even forest trees, as have been already noticed in our paper, is the injury they have also done the grass. Portions of Mr. Allen's meadows and pastures are covered with a perfect net-work of their trails, as they have eaten it away in burrowing beneath the snow. They have mined under stumps and fences like woodchucks, barked the trees, of every size, sometimes to the height of three or four feet, eaten off every green thing, not even sparing some wormwood plants, and occasioned losses to be estimated by years as well as dollars. So thoroughly have they devoured the grass and its roots in some of the meadow land, that Mr. A. calculates the hay crop will be nearly *one-third* less for their depredations.

The Pastures.

Mr. Allen is by no means an anti-shade-tree farmer. In clearing, he left now and then surviving representatives of the old forest race, and some of the finest positions are occupied by beautiful groves of second growth, comprising young trees of various kinds, in the care of which he takes a great and almost paternal pleasure. Not that all the pastures are shaded—they extend nearly a mile along the western bank of the island, and comprise some of the best of land as well as of the most beautiful locations. Here we found

The Herd

Of Devons, about forty in number, and in addition nearly as many Short-Horn grades. The Devons include some excellent specimens of the breed—for example, the \$100 prize cow at the Springfield U. S. Ag.



MR. ALLEN'S BARN—ELEVATION

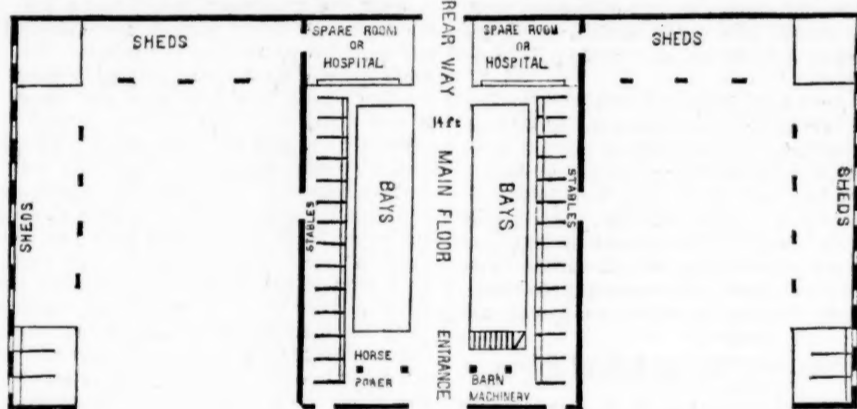
Society's Show, and a young cow, 4 years old, of Mr. Allen's own breeding, and a beautiful animal. They are from Mr. Stevens' and other importations, and were looking well, considering the severity of the past winter, which has been found very hard for stock generally. Very good bulls are the two which he now uses, one quite young, and both having many of the finest points of the Devon strongly marked. We understand that he intends disposing of a part of his cattle, as well as some of his sheep before another winter.

There are of the sheep, between six and seven hundred—Cotswolds and South Downs. They originated mostly with importations made by Mr. Rotch of Otsego Co., though some of the former were first brought over by Messrs. Corning & Sotham of Albany. But both have been so long on the farm, as to have become pretty well naturalized. They have found the winter a hard one, but are now in a thriving condition. About one hundred are wethers, for which there is always a good demand among the butchers. They averaged perhaps four pounds of washed wool at last year's shearing. Of the fourteen bucks, there are one or two South Downs which Mr. A. considers equal in breadth of back, round and well-filled forms, and other good

description given in the latter, which is closely condensed, conveys some important suggestions, and is accompanied by figures which add much to its value.

The body of the main barn is 100 feet long by 50 feet wide, the posts 18 feet high above the sill, making 9 bents. The beams are 14 feet above the sills, which is the height of the inner posts. The position of the floor and bays is readily understood from the plan. The floor, for a grain barn, is 14 feet wide, but may be contracted to 12 feet for one exclusively for hay. The area in front of the bays is occupied with a stationary horse-power, and with machinery for various farm operations, such as threshing, shelling corn, cutting straw, crushing grain, &c., all of which is driven by bands from drums on the horizontal shaft overhead, which runs across the floor from the horse-power on the other side; this shaft being driven by a cog-wheel on the perpendicular shaft round which the horses travel.

We would suggest an addition to the machinery, not mentioned in the description. In a barn like this, holding a hundred tons of hay, the labor of pitching up to the upper part of the bays is formidable. We would therefore propose the use of an elevator, like



GROUND PLAN.

points, to many of the latest importations, though the latter are somewhat superior in size.

Mr. Allen's orchards have suffered much from the mice, and he will, perhaps, some time give an account of his losses to our readers. He has nearly fifty acres of apples left uninjured, and promising a good yield.

Buildings.

Mr. Allen finds what is called the *plank house*, which style of building is much in vogue in that part of the State, exactly what he wants for tenant use. He has just been putting up one 14 by 22 feet, and another 16 by 28—the former costing only from \$125 to \$150, and the latter about \$200. They are commodious and durable, as well as cheap, and very neat in outward appearance. Of his excellent barn a description has already appeared in the Transactions, and in our Annual Register for this year. But as many of our readers may have met with neither, and as the plan has some important conveniences, and though very large, admits of any reduction in size, we quote the

that of the best modern threshing machines, to be worked by the two horses removed from the loaded wagon of hay to the horse power, during the pitching off of the load. This would greatly lessen the labor and quicken the operation of unloading. The same elevator would be used in carrying threshed straw from the machine to the bays. The simplest and best elevator for this purpose is made of a light, inclined board platform, four feet wide, on each side of which a rope or endless chain runs, connected by cross-bars, a foot or two apart, which slide over the upper surface of this platform, and sweep the hay upward as fast as pitched upon it.

A passage four feet wide extends between the bays and the stables, which occupy the two wings. This extends up to the top of the bays, down which the hay is thrown for feeding, which renders this work as easy and convenient as possible.

The floor of the main barn is three feet higher than that of the stables. This will allow a cellar under it, if desired—or a deeper extension of the bays—and it

allows storage lofts over the cattle, with sufficient slope of roof. A short flight of steps at the ends of each passage, admits easy access from the level of the barn floor.

The line of mangers is two feet wide. A manure window is placed at every twelve feet. The stalls are double; that is, for two animals each, which are held to their places by a rope and chain, attached to a staple and ring at each corner of the stall. This mode is preferred to securing by stanchions. A pole or scantling, placed over their heads, prevents them from climbing with their feet into the mangers, which they are otherwise very apt to do.

The sheds, which extend on the three sides of the barn, and touch it at the rear end, are on a level with the stables. An *inclined plane*, from the main floor through the middle of the back shed, forms a rear egress for wagons and carts, descending three feet from the floor. The two rooms, one on each side this rear passage, 16 by 34 feet, may be used for housing sick animals, cows about to calve, or any other purpose required. The stables at the front ends of the sheds are convenient for teams of horses or oxen, or they may be fitted for wagon houses, tool houses, or other purposes. The rooms, 16 feet square, at the inner corners of the sheds, may be used for weak ewes, lambs, or for a bull stable.

Racks or mangers may be fitted up in the open sheds for feeding sheep or young cattle, and yards may be built adjoining, on the rear, six or eight in number, into which they may run and be kept separate. Barred partitions may separate the different flocks. Bars may also enclose the opening in front, or they may, if required, be boarded up tight. Step ladders are placed at convenient intervals, for ascending the shed lofts.

A granary over the machine room is entered by a flight of stairs. Poles extending from bay to bay, over the floor, will admit the storage of much additional hay or grain. As straw cannot be well kept when exposed to the weather, and is at the same time becoming more valuable as its uses are better understood, we would suggest that the space on these cross poles be reserved for its deposit from the elevator from threshing grain, or until space is made for it in one of the bays.

A one-sided roof is given to the sheds, (instead of a double-sided,) to throw all the water on the *outside*, in order to keep the interior of the yards dry. Eave-troughs take the water from the roofs to cisterns. The cisterns, if connected by an underground pipe, may be all drawn from by a single pump if necessary. The quantity of water thus afforded appears to be much under-estimated in the article accompanying the description, where it is stated to be *five hogsheads* per annum from a roof of ten feet square. Now, instead of this small amount, no less than *thirty-six hogsheads* are yielded by three feet of water, the average annual fall in the Northern and Middle States—as a computation will at once show. The whole roof of the buildings, of the size here given, has over 12,000 square feet of surface, if we estimate correctly; this would give, as a daily average, twelve hogsheads of water, or twenty-four barrels—enough to water nearly a hundred head of cattle the year through. But if the cistern water were only used during the drouth of summer, there would be enough for three times this number. But as the whole yearly amount would be over four thousand hogsheads, the cisterns should hold at least a fifth of this quantity, if used constantly, or more than half this amount if used only in summer. Very few men would make them one-quarter the required capacity. This is a thing singularly overlooked.

An important advantage of placing the stables in the wings of the barn is, that it obviates the common objection that liquid manure from the stalls rots the sills—the stable sills being comparatively easily replaced if not under the main barn.

This barn is the re-construction of an old one, the convenience of which has been proved by twenty years'

use by the owner, who is so well known as one of the best and most enlightened of distinguished American farmers.

We wish to add, before concluding, a single remark on the manufacture of composts, alluded to in the description of the barn. Drawing out manure frequently, spreading and plowing in at once, are recommended in preference to composting. But as this is impracticable at all times of the year, we have found a better way, to draw out often, and, instead of applying at once, to compost it *in the field* where wanted, by alternate layers with fence-corner turf, plowed sods, &c. These retain all the volatile parts, and all the advantages of rotted manure are secured, with no extra *drawing of heavy materials*.

A Scioto Valley Letter.

We pass by a pleasant call—after a night-ride from Buffalo to Cleveland,—upon our friend THOMAS BROWN of the *Ohio Farmer*, to whom we are indebted for many favors, and whose excellent paper we are glad to find in high estimation, as it well deserves to be, among the farmers of the 'Buckeye State' generally. Indeed it is difficult to say which is the more popular, it, or its Editor,—both being known and read of all men.

Another afternoon and much of a night on the railroad, brought us to Cincinnati, passing through Columbus without a stop,—which we are in hopes of making on our return. The 'Queen City' was then in the midst of its presidential manufacturing, with the aid of thousands of outsiders—the largest gathering, according to all accounts, ever witnessed on such an occasion. The witching hour of from two to three A. M., was spent in the pleasing search for a bed—a curiosity only enjoyed by earlier arrivals,—and which being at that time altogether out of the question, we were glad to take the first train for Chillicothe at half past five.

A town of perhaps 8,000 inhabitants, it lies in the midst of a valley celebrated the world over for its remarkable fertility. The Scioto river with its tributaries, drains or enriches a region, it may be twenty miles in average width, and extending from the capital to the southern boundary of the State—much of it in farms of considerable size, and on which careful and economical systems of culture have taken the place of the exhausting modes frequently in vogue on rich and productive soils. Great numbers of stock are here fed for the Eastern markets, and corn is consequently an important crop. Wheat is also largely grown, oats to some extent, but comparatively little, we believe, of other grains. As to pasture lands, we never before conceived the full force of the expression "living in clover;" fields of this plant, just then red with a matted and perfumed covering of blossoms, were as beautiful a sight to an agricultural eye, as they could have been grateful to the palate of the most epicurean Short-Horn. Clover is also found, aside from the stock-product, to be the best and only necessary manure, for which purpose, both here and in the valleys of the Miami rivers, it is largely grown. It is generally turned in, the second or third season, effecting a rotation of say six years with crops of corn and wheat. It has made a very good growth this spring, though the grass, owing to a protracted drouth, will not apparently yield as heavy a hay crop as in our own State. Wheat is looking finely—frequently, we should judge, promising thirty to thirty-five bushels to the acre, though this is considerably more than the average product of the region, and is thought a heavy yield for large fields without extra care. The Mediterranean and Genesee (white) are both exten-

sively sown—the former being found, as we understood, much the less liable to rust of the two. We saw, what we never saw before, large bins of corn by the roadside, made of ordinary fence rails, the corn in the ear as it was first husked after last year's harvest, and ever since entirely unprotected by roof or covering of any kind—which cheap and easy way of storage is not uncommon, we were told, in the Scioto valley. It is, as might be expected from its beauty and fertility, a healthy country; but the unusually wet weather of last year, which is supposed to have had much to do in producing the plague of mice in our own State, here lent its influence to the propagation of ague,—which was quite prevalent last fall, and is somewhat so this season,—for the first time, they told us, since one or two similar seasons twenty-five or thirty years ago. The severe cold of last winter has done much injury to orchards and gardens through the State, where, as in other parts of the country, it was unparalleled both in degree and continuance. It may be a fancy of ours, or perhaps because they are now in their fullest June verdure, but we thought we had never seen forest and shade trees so beautiful as along the Scioto. It was, at any rate, refreshing enough to ride or rest beneath their graceful branches,—the swaying of which with the wind, as well as the surging waves in the grain and clover fields, we saw as finely produced as ever they were described or imagined by rural poet.

A call on Gen. WORTHINGTON, ex-president, and still a member of the State Board of Agriculture, afforded us much pleasure. He occupies a farm of 760 acres, a mile or two out of Chillicothe, beautifully located—about 200 of it in corn, 160 in wheat, and the balance mostly in grass. The mansion, which was built in 1808-10, is one of the large and substantial structures of "old times," and occupies a commanding situation. From the roof, one can obtain a good idea of the direction and extent of the Scioto Valley. In the southeast are seen the last peaks of the Alleghanies—not very far to the west begin those extensive plains which stretch hundreds of miles away in the successive prairies of Indiana and Illinois. General Worthington's pet appears to be his garden, in which he has a fine variety of herbaceous and flowering plants, also a number of fig trees, which generally produce well, though many of them have been this year cut down by the cold. He tries experiments with Patent Office and other foreign seeds to a considerable extent,—some of the results of which we should like to have had a little more space to chronicle. He told us that on December 24th last, he picked quite a bouquet of late roses and other autumn flowers, the weather by no means threatening any unusual severity, and on the next day came the snow, which lasted, with prolonged and extreme cold, through the whole winter.

Dr. ARTHUR WATTS, who is well known as a prominent member and one of the agents in conducting several of the importations of the Scioto Valley Importing Co., farms a thousand acres below the town, nearly one-half of it in corn—which crop, by the way, is thought a little backward, though favorable weather this and next month will make it all that can be wished. One lot, in wheat, of one hundred and twenty acres, and another of forty, were looking finely. Ninety-three acres of clover, in one field, was used as a pasture for fifty head of cattle, but the stalks and flowers seemed as tall and thick as though it was ungrazed meadow, and remarkably good at that. The Dr.'s herd includes about thirty animals, imported and of his own breeding—the demand for improved stock having been so great, we were informed, that he has sold nearly all that he could afford to part with without the loss of its best blood. Among the noteworthy animals, are the bull 'Medallist,' white, imported by the company in 1852, and purchased of Mr. Torr of Lincolnshire—generally good, as for example in flank and back, and especially so in the twist; its bull-calf 'Lewis F. Allen,' roan, 8 months old, and promising to vie with its sire's merits; the cows 'Strawberry,' about

8 years old, an animal of great fattening disposition, and her twin offspring 'Bessie Bell' and 'Mary Gray,' sired by 'Prince Albert 3d,' now in Illinois, and the first prize taker at the last Columbus show; a nice heifer from Mary Gray by Medallist; 'Arabella 3d,' 'Flora,' in poor condition but a good milker, and another heifer, 'Gertrude,' a yearling, and rather the pet of the whole. We saw also the imported cow 'Sunrise,' belonging to JOHN I. VAN METER, by whom she was purchased of the company for \$1300. We should not omit to mention, in conclusion, the Berkshire and Irish Grazier Hogs, to which Dr. WATTS devotes some attention.—In the midst of the best Scioto land, he knows how to improve to a great degree the advantages he possesses. We should not omit to add a word of thanks for his polite attentions, as well as those of several others in Chillicothe.

Thence we had a very pleasant drive of nineteen miles to Circleville, distant about thirteen from which is located the farm and extensive herd of HARNES RENICK, Esq., which we had hoped to visit, but found it impossible to obtain a conveyance for the purpose, on account chiefly of the sale of GEO. W. GREGG, some notes of which we give in another column, and where we were pleased to meet a number of distinguished stock-growers—among them Messrs. JOB RENICK, H. H. HAWKINS, Hon. R. F. CORWIN, Mr. REBER, of the enterprising firm of Reber and Kutz, owners of 'Monarch,' 'Fashion,' and other blood stock, and a fine herd of short horns,—and several others. We were anxious to arrange it so as to have been present at the sale of Mr. Renick on the 19th, but time being very limited could not do so, and, taking the cars the same evening we accompanied Mr. Hawkins to his pleasant residence in Bloomington. The next morning (June 6th) was chiefly spent in looking over his farm—about 400 acres, nicely situated, and mainly devoted to stock purposes.

The herd of Mr. HAWKINS includes a number of noteworthy animals. 'Wellington,' owned by him in connection with one or two others, was imported by the Clinton Co. Association in 1854, and sold by them for \$3700. He was bred by R. Lawson, is near four years old, and is brother to 'Starlight,' imported in '53, by the Madison Co. Association. 'Locomotive,' white, is three years old, descended from 'Morgan,' bred from the Scioto importations of 1834, and is a superior animal. 'Bracilia,' a fine cow, traces her origin to the 'Durham cow' of Col. LEWIS SANDERS' importation of 1817, crossed with Scioto importations of '34 and '35. A heifer from her, 'Favorite,' now nine months old, promises to equal her mother. 'Rosamond,' 'Lady Mulenburgh,' and several of which we have no room to speak in detail, are also very creditable animals, and go to form a collection of no little beauty and value. Mr. HAWKINS is the possessor besides of some nice Berkshires,—also a very commodious and well arranged barn. In the course of the morning we drove over to the farm of the Messrs. PERRIL, the owners of 'Count Fathom,' imported, and other valuable, thorough-bred stock. They have a farm of 1500 acres, devoted to grazing, and conducted with much skill and care.

We will close this already long letter by a brief paragraph in relation to the stock companies of Ohio and their importations, inasmuch as we have seen all we can of them and their descendants at least for the present. There are still however one or two localities we intend, if possible, to visit in returning. Before 1834, as our readers are probably aware, there had been few or no improved cattle in Ohio, with the exception of crosses with the "Patton" stock, as the English long and short horns, brought over from Kentucky were called, from the name of the gentleman who first introduced them into that state. The famous importations of Col. Sanders in 1817, added much to the value of the Kentucky cattle, and it is said that a drove of the improved stock, passing through Ohio to the east, first led to the idea, with Govs. Trimble and Vance, and Messrs. Felix, George and William Renick,

Thomas Huston, M. L. Sullivant and others, of forming a company for the purpose of effecting a similar advancement in the cattle of Ohio—which was accordingly done, and FELIX RENICK acted as principal agent in selecting about 20 head, which were brought over in 1834. This was followed by numerous importations at different times in subsequent years. In 1852 a new company was formed in the Scioto Valley, including some members from Clarke, Clinton and other counties, and Dr. WATTS and GEORGE RENICK, Jr. acted as agents in procuring 19 head or thereabouts. In 1853 an organization was effected in Madison Co., among the importations of which were 'Sheffielder,' 'Starlight,' his brother 'Colonel,' and Marquis—the second purchased after his arrival by a Union Co. company for \$3000. Messrs. COULTER & HAWKINS were the agents of an association formed in Clinton Co. late in 1853, which brought over in 1854, a fine selection, embracing 28 head—among them 'Wellington,' already mentioned, 'Warrior,' bred by Richard Booth, the second of his breeding that ever came to this country—the first 'Thornberry,' which we should have mentioned with the Madison Co. importations of 1853, being now owned by Harness Renick of Pickaway—and several excellent cows, among which 'Duchess,' bred by Wm. Harrison, brought \$1675, and 'Victoria' \$1,000. A Clarke Co. importation made in 1854, through the agency of Dr. Watts, we think concludes the list. These companies have done wonders for the stock of Ohio, and we were glad to learn that most of them have been immediately profitable investments, as they must have been, at any rate, in the long run profitable for the country and for the individuals engaged.

We reached Cincinnati a second time Friday evening, and lay awake a large portion of the night, with one cannon, two drums, several trombones, and a large crowd of the enthusiastic and unterrified, under the hotel windows, rejoicing over the nominations, and practicing variations on the war whoop, indiscriminately mingled with Yankee Doodle in a loud key and speeches still louder.

The Apple-Tree Borer.

MESSRS. EDITORS—I wish to inquire through your columns, if there is any preventive of the ravages of the *borer* in young apple-trees, short of cutting them out with a knife? I have a young orchard which originally consisted of sixty trees, from which the borers are thoroughly hunted spring and fall. The field is cultivated every year with some low hoed crop. The trees washed in spring with strong soap suds, and sometimes a bushel of leached ashes heaped around the trunk in the fall and hoed in around the tree the following spring; and yet I shall be unable to bring one-half of the original number into bearing, while the borer will secure the lion's share. I have read of drawing them from their hiding place with a small hooked wire, but as they fill their holes with the woody fibre which they eat away in their progress, my skill is entirely insufficient to reach them in this manner. Being unwilling to do without fruit for myself and family, information as to how to prevent the ravages of these *workers in darkness*, would be thankfully received. VERMONT.

If the borer is taken in time, there is no difficulty in destroying it by punching it to death in its hole with a flexible twig. The peculiar crushing tells at once the death of the destroyer. It is of course necessary to do the work *thoroughly*, as often as two or three times a year, at least. A sharp wire with a barb, would probably clear out any hole of anything left by the insect. We have seen trees rescued by this process, in which the borer had made great progress, and had perforated it in all directions; but it requires close attention and vigilance. Young trees, in which

much injury has not yet been committed, may be easily kept clear, if often and thoroughly examined, not forgetting that the holes by which the trees are entered may be buried by transplanting, below the surface.

Raising Pear Seedlings.

MESSRS. EDITORS—I have been a reader of your most excellent paper the past four years, and I wish to inquire if pears can be raised from the seed in this State. If so, what soil would be suitable, and where could I get good seeds? How can I tell good seeds, and what is the price? GEO. SHERMAN. Huron Co., O.

Pear seedlings may be grown in any part of the country, where a good, strong, fertile soil exists. The great difficulty, however, which is found to exist in all parts of the country, is the *leaf-blight*, occasioned by a rust or parasitic fungus on the leaf, occurring in summer and checking the growth. It is best avoided by planting the seed in *new* land of strong fertility, away from other trees which have been affected. Many nurserymen, however, prefer to import their seedlings from Europe, where the leaf-blight is not so formidable.

For raising standard trees in the nursery row, a *clayey* soil is generally found much the best—in some instances the difference between clay and gravelly loam has proved very great, the growth the first season from the bud sometimes being five times as great on a clayey soil as on one equally fertile but of a sandy or gravelly character.

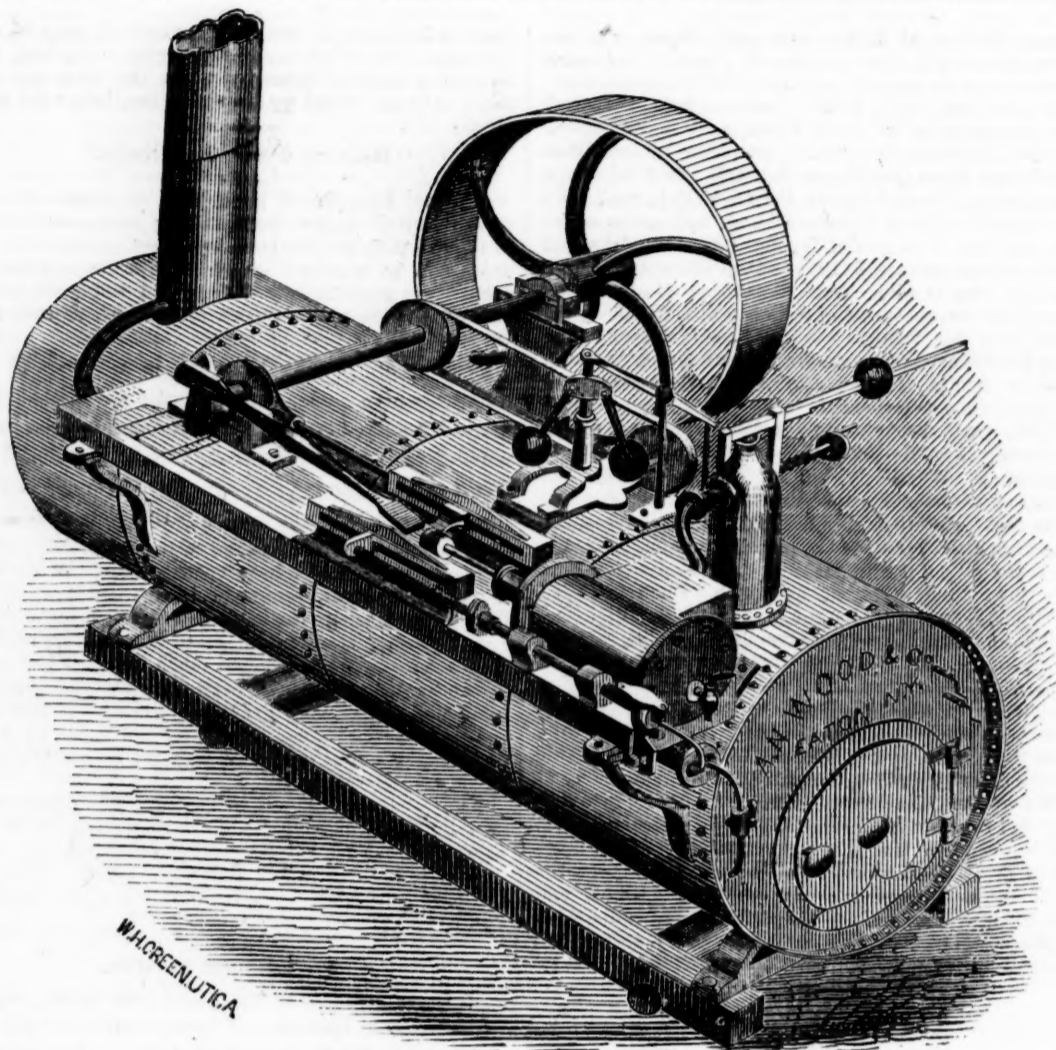
The seed are difficult to procure, being only occasionally found in market. G. G. Sheppard, 159 Front Street, New-York City, sometimes has them on hand. The price is three to five dollars per quart. The quality may be known by splitting them open; if fresh, white, and plump, they are good.

Trees Injured by Mice.

J. H. WRIGHT, in a late no. of your paper, says—"the mice have made sad havoc with nurseries and young orchards in this whole region so far as he can hear," and then he inquires for a "preventive for the future." Judging from my own experience in this matter, there is no certainty that the mice will injure fruit or any other trees in his vicinity the coming winter. This section of the country was overrun with rats and mice in the years 1850 and 1851; the damage done to fruit and forest trees by their debarking them, and the loss in hay, grain, and other farm crops, was immense. So abundant were they in those seasons, that boys became wearied out in slaying them, and all the cats were surfeited into uselessness by a superabundance of mouse-meat. The following winter, no injury was done to fruit or other trees, or to grass grounds; so the next summer, nor since, have they done any serious damage to farm crops. Where such myriads of rats and mice came from, and where they went to, none can tell; and what *besom* of destruction was called into requisition to thus suddenly sweep them from our midst, is among the mysteries that man cannot solve. We hope Mr. W. and others, in regions where these *varmints* have been so abundant, may speedily meet with the same happy riddance that we have. LEVI BARTLETT. Warner, N. H., May, '56.

Different Breeds as Layers.

E. A. W. of this city, who has fine specimens of different varieties of poultry, informs us that from April 1 to the 21st, six of his Black Spanish hens laid 64 eggs—five Game, 39—four Bolton Greys, 47—two Speckled Dorkings, 20—two Buff Shanghais, 18—two White do., 19—making 207 eggs from 21 hens in 21 days.



A. N. WOOD & CO.'S PORTABLE STEAM ENGINE FOR FARM PURPOSES.

Portable Steam Engine for Farm Purposes.

Steam engines are in common use in Great Britain for farm purposes; and in all the modern farmeries of England provision is made as regularly for the steam engine as for the threshing machine, chaff-cutter, &c. As yet they have but rarely been employed for farm purposes in this country. We cannot doubt however, but that the time is rapidly approaching when our large farmers will find their employment a profitable investment, and we take pleasure in copying the following account of the introduction of one into the farm operations of our friend J. A. HUMPHREYS, Esq., of Versailles, Ky. It is from a letter written by him to one of the editors of the *Valley Farmer*, from which paper we copy it.

You request me in your letter to furnish you with an account of my "Portable Steam Engine for Farm Purposes," which I do with pleasure, fully assured that the substitution of such a steam power, on all our farms of moderate size, is only a *question of time*.

The Engine as yet has been tried only under the most unfavorable circumstances. Standing out doors, entirely unprotected, the weather intensely cold, the wood green, the machinery all new, many little advantages not given it,—yet it more than equalled my expectations, and gave entire satisfaction to all who

saw it work. I tried it threshing grain with perfect success—not using more than one-third the amount of steam which was kept up, without the least difficulty—nor did there appear to be the least danger of setting fire to the straw. I then tried it crushing corn in the cob with one of Pitt's Crushers, which I have had in use for the last four years, and though it was dull, and many of the teeth broken, with *such* an application of power, I never saw better nor faster work done. I also tried the engine cutting straw, corn stalks and hay with equal success, using one of Sinclair's 13 inch cutters. I was satisfied that the engine could have driven the three machines all at the same time. Will the Engine do? is a question quite settled with me, and in future I shall use it as a motive power for all the machinery on my farm, to which power can be conveniently applied. The space occupied by my engine is 6 by 9 feet. The boiler is 41 inches in diameter, and made of the best No. 4 Philadelphia stamped iron. The exhausted steam passes into the smoke pipe, killing all the sparks. The smoke pipe is 19 feet high and 12 inches in diameter, which gives a strong draft. The whole machine is mounted on a strong iron truck, with wheels 20 inches in diameter, and can be easily drawn to any part of my farm by four horses. My engine can be worked up to about an eight horse power. The weight, including the truck, is 4900 lbs. These engines are manufactured by A. N. Wood & Co., [of Eaton, Madison Co., N. Y.] and for compactness of form, simplicity of construction, arrangement of working parts, durability and good workmanship, they can scarcely

be surpassed. They are easily managed, as you may judge from the fact that mine is being *safely* run and perfectly well attended by one of my negro boys, who had never so much as *seen* an engine before. The price at which these engines are afforded places them within the reach of nearly every farmer. They are made from $2\frac{1}{2}$ to 10 horse power, costing from \$225 to \$835. My engine consumes from three to four barrels of water per day, and about a quarter of a cord of wood.

In a later letter from Mr. HUMPHREYS, in answer to another inquiry, which we find in the *Penn. Farm Journal* for May, he says that since the above was written, he has given steam a more thorough test, and made the most satisfactory additions to his stock of experience. From this letter, we quote as follows:

There are several manufacturers, who are making different styles of portable engines. I much prefer the one I have, made by A. N. Wood & Co., to any other with which I am acquainted. I shall not attempt to give you a description of the plan and arrangement of the engine. I will only say that it is admirable for its simplicity, its perfect workmanship, and the strength, durability, and *completeness* of the whole. There is but little room, it seems to me, for improvement in it. I only regret that all of your readers who feel an interest in the matter, could not satisfy themselves of its great simplicity, and the ease with which it can be managed—even by the most inexperienced hand—by seeing for themselves, rather than from any written description.

Now for the labor of running it—for this only one hand is required; he can run the engine, keep up the fire, oil the parts, and do all that is necessary about it, with the greatest ease. I have run my eight horse engine all day, and consumed but four barrels of water and one-fourth of a cord of wood. If pushed to its utmost capacity from daylight until dark, it will consume a little more. My engine has been in use since the middle of January last—not a screw loose yet. It works with as much regularity and precision, and as smoothly, as a patent lever watch.

My principal work has been preparing food with corn crushers and straw cutters for one hundred head of mules and about one hundred head of cattle and horses. With one of Sinclair's cylindrical screw propeller cutters, I have cut up a four-horse wagon load of oats in *twenty-two minutes*, and one hundred and seventy-seven large bundles in fourteen minutes, not using more than one-third of the power of my engine. I consider Sinclair's straw cutter one of the most efficient now before the public. I use a corn or cob crusher, made by John A. Pitts, of Buffalo. I have tried and seen tried many others, but none of them are at all comparable to it, in my judgment, either as regards efficiency, durability, or convenience. The one I have has been in use for four years, and when the steel plates or knives are worn out, a new set can be put in at a trifling cost. Driven by my little engineer, it easily crushes thirty bushels of corn in the ear per hour, making finer meal than I have ever seen made by any other crusher. I am now making my own meal with one of Isaac Straub's corn mills, the "Queen of the South." These mills are too well known to need any commendation from me. The size I have is a twenty-two inch burr, for which my engine proves to be an admirable power. For threshing it is unequalled. I have just given it a most satisfactory trial with one of Moffit's patent eight horse separators, manufactured by Messrs. Owens, Lane & Dyers, of Hamilton, Ohio. The machine was put in operation under the direction of Mr. Owens, who came over from Ohio especially for that purpose. He expressed his decided opinion, that the engine was far superior to any horse power he has ever seen applied to one of his machines.

Mr. Straub, of Cincinnati, has contracted to furnish me with one of his portable saw mills—"the King of

the Woods,"—which, driven by my engine, he guarantees will cut fifteen hundred feet of plank per day, in our hard wood—maple, ash, oak, elm, &c. I feel perfectly assured that there is not a machine in use on our farms, to which power of any sort can be applied, which this portable engine will not drive, and prove the most efficient and also the most economical power. I shall apply it to shelling corn with Reading's patent corn sheller and cleaner, Emery's cider mill, and other machinery.

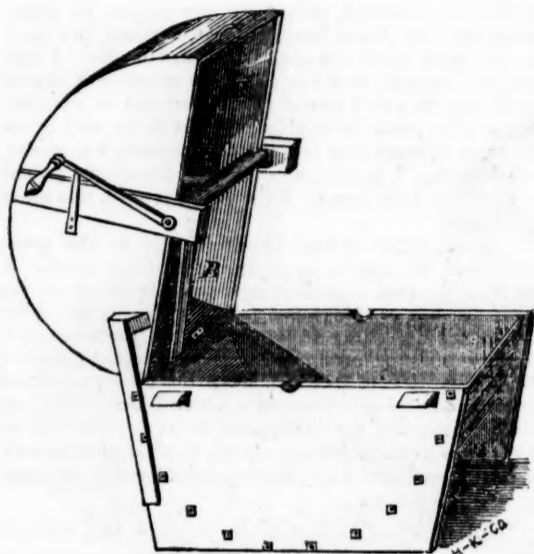
I must not fail to call attention also to the great utility of the engine in steaming food for stock. A steam gate and pipe leading from the dome to the steaming box or trough is all that is necessary. After the work of crushing or cutting is done, the amount of steam remaining in the boiler is sufficient to cook a large quantity of food. I have for nine years used horse power for all purposes to which I have lately applied steam, and my experience so far satisfies me that steam has greatly the advantage in point of economy, and I now offer all my horse powers for sale at greatly reduced prices.

We learn from Messrs. A. N. Wood & Co., that out of the large number of steam engines manufactured by them the past year, they sold six for farm use—two to Louisiana, one a 6, and the other $2\frac{1}{2}$ horse power—two (both eight-horse,) to Kentucky, and two in this State, both four-horse—and that in every case they have given entire satisfaction—so much so that they anticipate a rapid increase of the demand for them as their value becomes known to the planters of the South and the large farmers of the West.

Cut Feed Mixer.

MESSRS. EDITORS—Any one who has ever attempted to mix cut feed, in the usual way, knows how difficult it is to do it perfectly. The water seems to have a particular fancy for the bottom, and in such weather as we have had the past winter, it is nearly impossible to prevent some of it remaining there, in the form of ice. Our feed tub collected, between Jan. 1st and Feb. 15th, nearly one foot in depth of solid ice, in spite of much pains taken to prevent it. To avoid the difficulty, I constructed a feed box, which, after a month's trial, I have no hesitation in recommending to my brother farmers as a labor-saving machine. It is very simple in its construction, as will be seen by the accompanying drawing. The box, internally, is a semicircle, which with the lid when closed, forms a circle, 4 feet in diameter by 2 feet in width. The bottom is made of a sheet of galvanized iron, $6\frac{1}{2}$ feet long by 2 feet wide. The sides are pine boards, and are grooved to receive the edges of the bottom, which is kept in place by small rods which run through from side to side. A strip of board, A, runs across the front end, and is grooved on the under edge to receive the end of the sheet iron. The opposite end is bent around a rod, and forms the lower half of the hinge. B, B, B, are arms or sweeps, placed, one near each end of the axle, and one in the middle, and at right angles with each other, leaving one side vacant; otherwise the feed would prevent the lid from shutting down. C, is a steel spring to hold the crank and arms out of the way in filling and emptying, and also to keep the arms in the right position for closing the lid.

It allows the crank to turn forward freely but not backwards. The crank arm should be at least two-thirds as long as the sweeps; otherwise it will turn too hard; and for a large box, calculated for mixing more than 3 or 4 bushels at once, it would be advisable to have a pair of gear wheels, to increase the power.



The top of the lid is made of half inch whitewood boards matched. In using it, the ingredients may be thrown in at random,—the water first is more convenient—when a few turns of the crank, occupying less than a half minute's time, will do the work perfectly.

If no more water is used than the feed can hold, not a drop will be left on the bottom; the first turn of the crank bringing it uppermost. Not a particle of ice has formed on the bottom of the box, and but little on other parts, although we have used it when the mercury stood at 6 degrees below zero. It distributes the water so evenly that a very little is found to be sufficient to make the meal adhere to the chaff, which makes the feed preferable for stock in very cold weather.

The bottom of the box might be made of wood, but would I think be more likely to collect ice. I find that an iron sink makes less ice than a wood one, and whenever the mercury rises a few degrees above the freezing point, it soon becomes loose, which is not the case with a wooden one. The box is painted on the inside, and to avoid chafing it off, we use a wood bladed shovel for taking out the feed. It will hold 5 or 6 bushels. A smaller one would answer a good purpose, and occupy less room.

I would not be understood to recommend my box for mixing small quantities where the meal used is nearly equal to the chaff in amount, as I think it would adhere to the box considerably. But such is not the custom with farmers generally.

My own practice is to cut my coarse fodder, and add meal enough to make it equal to good hay. I do not agree with those who recommend farmers to cut all their fodder, as I do not think it will pay at the present price of labor; but I do advise the farmers on our New England hills to feed out their grain with their coarse fodder, and sell their marketable hay, rather than impoverish their farms by selling grain. It requires no argument to prove, that with a convenient market, the hay from an equal amount of ground will nett them the most; and all experience proves will injure the land the least. But where there is not a market for hay, the high prices of cattle and dairy products renders it doubtful whether it is profitable to sell either hay or grain. Let the valleys and western states supply the grain market.

Cut feed is undoubtedly best for work horses, and clover hay should never be fed to them dry. Green clover makes excellent feed, particularly for milch cows, but is not relished by cattle when dry, owing probably to the choking dust from the down which covers every part of it; as when cut up and moistened they eat it freely. To make it feed freely into the cutter, before pitching from the mow, cut it with a hay-

knife into strips from 5 to 10 inches wide; then with a platform at the rear and on the left of the machine, one man alone will cut nearly as fast as two will in the usual way. H. V. WELTON. *Waterbury, Ct.*

P. S. In a later letter from Mr. W., he says—"Since sending you the drawing, I have made an important improvement, and to any one who will go into the manufacture of them and sell them at a fair price I will give all the information in my power. I have no desire to make a speculation out of it."

Seeding Grass Lands.

G. H. in the Co. Cent. of May 1, wishes to know if seeding with buckwheat will do. My experience teaches me not. The buckwheat, if the land is rich enough for good meadow, will grow so rank as to kill out the grass seed. I have, after several unsuccessful attempts at seeding moist lands after a crop of grain, found it the most sure way to seed as early in the spring as practicable, to grass seed alone, using one-half herds grass and half red-top, always mowing a good crop the first year, and still better after, until the grass gets "bound out," when I turn the sod as smooth as possible, if the ground will admit, with a double Michigan plow, as it pulverizes the ground so nicely, and seed anew. If done the last of August or the first of September, with a sprinkling of fine manure on top, you will get a very heavy crop the first mowing. Meadows treated in this way last longer, and produce heavier crops than those seeded after a grain crop, which is very exhausting to the soil, and leaves the grass roots feeble and liable to be killed out in winter. My moist lands are the most profitable of any on my farm. M. J. PERKINS. *Cream Hill, Rutland, Vt.*

Green Crops as Fertilizers.

MESSRS. EDITORS—In your paper of this date, is an inquiry as to the effect of turning under *green corn* as a fertilizer. I remember an experiment of the kind, made about a half dozen years since, by Dr. ANDREW NICHOLS of this place, a gentleman of extended scientific attainments, on half an acre of ground upon his farm in Middleton. The Doctor reasoned much as does your correspondent, that the fertilizing power would be in proportion to the quantity of material used; but it failed entirely. I saw it when turned under, and completely covered with the sod. I saw the ground in July next following, when the corn stalks were about as sound as when first covered; and there was no appearance of any dissolution. Perhaps under other circumstances, it might have been done with better success;—but the Doctor was quite satisfied that the experiment was not worth repeating. I would not discourage an experiment with accurate weight and measure as you propose; but I have very little hope of its being successful.

The best illustration of turning in a green crop as a fertilizer, that I have ever witnessed, was on land upon which onions had grown for a number of years; the ground being fully manured. Shortly after the crop of onions had been gathered, it was plowed and sowed with oats. These oats were permitted to grow till late in autumn, when they were completely turned in and covered. The next spring the ground was sown with onions, with a slight top-dressing of manure. The onions flourished finely, until harvest, when over seven hundred bushels to the acre were gathered—being *thirty three per cent* more than on the same kind of land in the same field, where no oats had been imbedded. P. So. Danvers, Essex Co., Mass., May 8.

Horticultural Intelligence.

The last number of the *Horticulturist* contains a great deal of interesting matter. The leading article from the Editor furnishes several experiments with "feeding roots," on the same principle, (but in a different manner,) that Durhams and Berkshires are fed to produce a rapid growth. We have often had occasion to point out the error of heaping-up, or spading-in, a pile of manure just at the foot of the trunk, while the great mass of the roots needing the nourishment, were many feet or yards off from the body of the tree, and which consequently get none of the nourishment. The mode here pointed out, and formerly adopted with great success at the celebrated Dropmore garden in England, is just the reverse; and consists in beginning at a distance of ten to fifty feet from the tree (according to its size) and cutting radiating trenches towards its body, one to two feet deep. When the young rootlets are reached, they are gently raised up, and a compost suitable to the wants of the tree, filled into the trenches, in place of the dry earth, which is carted away. This mode has been more especially used for evergreens, and the composition usually found best for these, is a mixture of fresh rich mould and decayed leaves. The roots of evergreens are near the surface, and for this reason the feeding process as applied to them is quite easy. One of the experiments mentioned by the Editor of the *Horticulturist*, is the following:—"The experiment was tried on a Norway fir, which is still the graduated thermometer to tell of the advantages of feeding roots. It had the appearance of being quite healthy, but had been planted two years before in a clay soil, in a hole about three feet wide. We had trenches dug to its rootlets, beginning at a distance of seven feet and a half only from the tree. The rootlets were found making a vain effort to penetrate the clay which they reached the previous autumn. Additional nourishment gave continued impetus to the plant, which grew far beyond its contemporary neighbors, rarely increasing less than three feet per annum. In three years the roots were again at the borders of the clay, and, for the sake of an experiment, we then left them to battle with their difficulties as best they could. The annual growth began sensibly to diminish, till the third year its leader grew but six inches; the side branches partook of the stunting, when we relented, and gave another course of feeding by extending the trenches; the growth immediately was sensibly increased; the second year it was as vigorous as of old, and is now one of our best specimens."

PRUNING EVERGREENS.

The same article furnishes the following observations on pruning evergreens:—

It is a question not often mooted, whether evergreens do or do not require the same cutting back as deciduous trees, when removed. Our own experience indicates that a slight trimming is useful. The mode of operation on the Norway fir, for instance, is this: Cut back the limbs of last year's growth, using the dissolved shell-lac on cuts, and leaving the leader untouched. The effect is the same as that on deciduous trees, with this additional advantage: the plant throws out at least two—probably more—leading limbs, and the result is that of thickening the growth, and improving the appearance. For the sake of experiment, we carried this system to as great an extent, with a single specimen, as possible; ere many years elapsed, the limbs became so heavy with numerous branches, that they broke with their own weight. Others, cut back once in every three years, have attained rare beauty and a close habit.

CULTURE OF THE APRICOT.

An interesting communication from Mr. TOMPKINS of Germantown, N. Y., ten miles below Hudson, gives us some valuable facts. His soil is decidedly clayey,

the growth of the tree moderate and hardy, and the crop often too heavy for its quality, the curculio finding but little encouragement in such compact ground. Last year, from 25 trees, a part of them nine years planted, and the rest within four years, there were taken 12 bushels, which were sold in New-York market at \$5 to \$10 per bushel, mostly at the last named price. One tree, nine years old, has averaged over a bushel for the past three years.

The fruit buds of the apricot are hardier than those of the peach; it is nearly allied to the plum, well known for its great comparative hardiness. This difference between the peach and apricot was distinctly shown in the winter of 1854—5, when the thermometer sunk to 26° below zero, destroying every fruit bud on the peach above the snow line, at the same time that large numbers of the apricot buds escaped, and subsequently came out in flower. The great difficulty with the apricot is the liability to dead patches in the bark, which often increase until the tree is destroyed. These, so far as our own observations have extended, are more frequent where there is a moist or wet subsoil, natural drainage being always better than artificial, because a naturally dry bottom extends over the whole surface. We have not found propagation on hardy plum stocks to mend the matter in such instances. We want a remedy for this evil—for the apricot, ripening as it does, a month before early peaches, and possessing much of their delicious qualities, is too desirable and valuable a fruit to throw away yet.

UNDER-DRAINING.

The editor remarks that nurserymen who had underdrained their grounds, were observed this spring to be delivering their trees at least ten days earlier than their neighbors who had neglected it—a most important difference for a nurseryman—and equally so for a gardener or farmer.

LARGE PRODUCTS.

There are one or two copied articles in this number of the *Horticulturist*, which furnish statements at least striking, if not entirely true. One is from the *Independence Belge*, which informs its readers that "in the Belgian colony of St. Thomas, a potato has been grown weighing more than 50 lbs." Why not "as well be hung for a sheep as a lamb," and say it weighed five tons!! The other is from the *National Intelligencer*, and describes the Chinese Sugar-Cane, "one acre of which produces twenty-five tons of fodder, of the most nutritious and excellent kind." This is named in connection with the Chinese Yam, to which the *China Tree-Corn*, and the *Chinese Mulberry*, should have been added.

Curing Corn Fodder.

MESSEURS. EDITORS—If it will benefit Wm. J. Pettee, of Lakeville, Ct., or any body else who desires to know the right way to cure corn fodder for winter use, you are at liberty to give publicity to the plan that I have adopted with unfailing success for several years. As soon as the corn is fit to husk in the fall, have it husked, and every shock tied up in bundles just large enough for one man to handle with ease; and never leave more than one day's husking out at a time, for the bundles never handle so well and so light after they once get wet. It is much better to have shed room enough prepared for all the fodder, so as to protect it entirely from the rains and sleet of winter, for whenever it gets wet it will mould, and then the stock will not eat it. Where the corn is very large, and the shocks heavy, I have them cut off about two feet below the ear, and before leaving the spot have the stump cut off at the ground. This dispenses with the labor of handling those heavy ends which the cattle will not eat, and they might as well decay and make manure where they fall, as to be hauled to the barn-yard, and hauled out again. Timothy hay, when it is plenty, is the best to make bands to tie up with, but wheat straw will do. A. CHANDLER. Sandy Spring, Md.

Mulching with Living Plants.

At the discussions of the Fruit Growers' Society of Western New-York last winter, an intelligent and skillful cultivator advanced an opinion so obviously in error, and at the same time so commonly believed, that its correction seems to be required. He said, "I believe we can ruin a soil in a few years by leaving it exposed to the scorching rays of the sun, through the long summer months. I should prefer some root crop, and I think you would retain more in the soil by keeping it shaded, than you would lose by taking a crop from the ground. Let us have crops, if it is only to keep the ground shaded from the sun." We are not surprised that such opinions as this should be common. The surface of the earth is sometimes left bare—no stirring is given to it—it becomes hard, and nearly as unsuitable for the growth of young trees as a pavement; and the few weeds that spring up do not make the case any better. On the other hand,—the ground is planted with carrots or potatoes, and the surface is kept mellow. The trees grow finely, and succeed decidedly better than in the other instance. This is considered as indisputable proof that the *crop* benefited the ground. The fact is just the reverse. The hoeing and loosening of the earth, in cultivating the crop, has proved beneficial, the crop itself is detrimental. This is most amply proved on the one hand by allowing a crop to grow, which receives no cultivation, as for example wheat or meadow; the injury to the trees has, in all cases, been found greater than in a bare, plowed field, that remains uncultivated. Nothing is more common than to lose half the young trees that are set out in a meadow or grain field. "Shading the ground" with the crop does no good. On the other hand,—repeated trials show that young trees set in ground on which *nothing* is allowed to grow but the trees, and which is repeatedly stirred, will sometimes nearly double the growth of those growing with potatoes or other root crops.

There is reason for all this. The first principles of vegetable physiology would lead to such a conclusion before a single trial was made. Plants not only withdraw nourishment from the soil, but they pump up through their stems large quantities of moisture, for the supply of the rapid evaporation which is going on through the leaves. The advocates for shading with growing plants would be surprised, should they examine the soil in which plants have grown, to find it dry and nearly destitute of moisture in time of drouth, while adjacent soil, kept bare but mellow, would show large quantities of moisture, if turned up to a proper depth. This contrast we have had occasion to observe in repeated instances. Plants will draw the water up from the soil and dissipate it in the air, several times faster than any evaporation can take place from a mellow surface. In a dry time, the celebrated Dr. Hale found that a bunch of grass threw off from its leaves enough moisture, in two minutes, to condense in drops on the inside of a glass under which it was placed, and to run down the sides. No bed of mellow earth could do this.

Many cultivators of young fruit trees have discovered by experience that a growth of weeds and grass is highly detrimental. But what essential difference there is between the growth of weeds and of any cultivated crop, so far as its influence in exhausting the soil, and exerting a prejudicial influence on young trees is concerned, they appear never to have thought of. However, so long as trees are looked upon as a sort of fag end of the vegetable kingdom—that is, so long as they are expected to take the last chance in cultivation,—it is better to plant a crop of potatoes or turnips among them, for the sake of the good treatment which

the root crop is sure to receive, although worth far less than the trees which are thus indirectly benefited.

Mulching—or shading the ground with *dead* vegetable matter, which can take nothing from the soil,—is a very different process from the objectionable practice we have spoken of. But one of the best kinds of mulching, is when the operation is performed with *pulverized earth*. It is quite as good as saw-dust and tan-bark, more easily procured, and more readily got rid of when the process ceases. The only difficulty is, the pulverizing process has to be occasionally repeated with the rake, hoe, or cultivator, in order to break the crust which gradually forms; while tan-bark and saw-dust do not form any crust; and this is the reason why the former is so often rejected by those who think the labor of pulverization an intolerable evil, and are willing to expend twice as much in carting the saw-dust and tan.

Experiments,—tried in all imaginable ways;—and *observation*,—made so repeatedly and for so long a period, as to amount to actual demonstration,—have established these simple truths in the cultivation of young trees through the summer, namely, 1. The best and easiest of all ways to keep up vigorous growth and to prevent any loss,—is to keep a clean, mellow surface, by the often repeated passing of the horse cultivator. No crop interfering, it may be done rapidly, easily and cheaply. 2. For those persons who think least of what costs them most, and *vice versa*, the next best mode is to cultivate root crops or such as require repeated hoeing. 3. Lower down the scale, but not at the bottom, is the practice of planting in bare or plowed ground, and leaving it unoccupied, taking no further care of either land or trees. 4. A sowed grain crop is still worse, but hardly worst of all, for the previous plowing of the ground has been enough to produce a slightly favorable effect. 5. Last of all, lowest in the scale, is planting in a meadow, where there is nothing whatever that is favorable; the roots below rob, the growth above smothers, the turf around imprisons, and the tree languishes and in most instances dies.

It would be worth thousands of dollars,—yes, hundreds of thousands, to the country at large, if the State Agricultural Society, or private individuals, could perform a few sets of experiments of the easiest and simplest kinds, and have them widely reported, showing the above-named results in their different grades. Let five rows of young peach trees be set out and treated as described, viz: One row in clean, constantly mellowed earth; the next in a crop of potatoes; the third in a bare uncultivated field; the fourth in wheat, and the fifth in a clover meadow. We shall venture to predict the average results; viz: The shoots on the first row will grow in a season three feet long; on the second one and a half feet; on the third six inches; on the fourth half an inch to an inch on such as live; and on the last none at all, three-fourths dying before any growth is made. We hope the trial will be made, and the results demonstrated and published.

A Productive Tree.

A. LOOMIS, of Byron, Genesee county, N. Y., says that the past season, a tree of the Baldwin apple, standing on the ground of his brother, produced last year twelve barrels (besides four or five bushels of wind-falls,) that sold for \$2 25 per barrel. The year's product of this tree was consequently *twenty-seven Dollars*—quite equal to an acre of wheat in nett profit.

Worms in Horses.

I think "C. M." will have no trouble with wormy horses, if he will put a strong handful of sifted ashes on their feed three or four times a week, and once in two or three weeks scald some wheat bran—a few hours—with a handful of ashes for each horse. I should prefer each mess by itself. A SUBSCRIBER.

The Housewife.

Washing Clothes.

MESSRS. EDITORS—Please give a full statement of the latest and best chemical process of washing clothes by hand; also the best washing machine, and you will oblige many readers by so doing. WILLIAM TEMPLE. *Greene Co., Tenn.*

So far as our limited knowledge extends, the best chemical process in washing, is the application of that peculiar compound of oil and potash commonly known as soap. There are modes of applying potash, soda, &c., to lessen the labor, but nearly all of these have been found to have some drawbacks, and have been discontinued after a time by those who adopted them and warmly commended them at first. There may be however, some which have stood the test of thorough trial, and if so, we should esteem it a favor if some one who has been thus successful, would give our correspondent and readers the desired information.

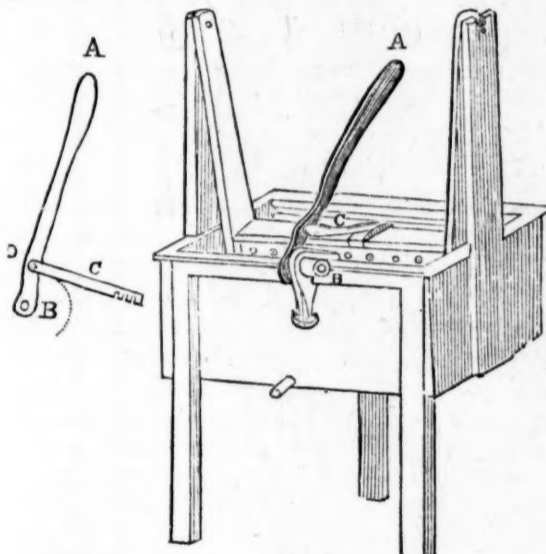


Fig. 2.

Fig. 1.

The best washing machine we know of, is one we have used for ten years and more, and is exhibited in the accompanying figure. It is worked by an alternating motion of the handle or lever A, which turns on the central hinge or joint B, pressing the perforated board which swings like a pendulum within the trough by means of the connecting bar C, against the grooved side of the trough beyond. Fig. 1, is the whole machine; Fig. 2, the handle and bar C, detached, showing the notched end of the bar, for regulating the space for the clothes. The handle and bar are cast iron. The perforated board and its suspending frame, are easily lifted out whenever necessary.

The box or trough must be made very strong, for the pressure exerted against the side by means of the lever, is enormous. At the first motion of the handle, the pressure is only five or six times as great as the strength of the person working it, but as it approaches a horizontal position, it becomes greater and greater, precisely like that of the *lever printing press*. A little care is required in regulating the quantity of clothes, so as to admit the lever being brought down to a level position as the finishing stroke is given.

So great is the force of pressure exerted upon the clothes, by the last or finishing motion of the lever, that a boy ten years old can work the machine with ease, and it does not require more than one third the labor needed in washing with the old-fashioned wash-board, and does not wear or chafe the clothes in the least de-

gree. A great advantage found in working it, is that one's weight is *thrown upon* the lever, and it accordingly possesses that particular superiority of the application of strength found in rowing a boat, the only difference being in pushing instead of pulling.

Machines on this principle are made and sold in various parts of the country. Some are made too complex, being encumbered by a wheel and needless appendages. The simpler the better. We used one about ten years, without fifty cents of repairs. The cost need not exceed five or six dollars.

To Make Pure Wine of Apples.

Being aware that much wine sold for genuine champagne was manufactured from cider, we informed a correspondent a short time since of this fact in answer to his inquiry. The following letter was elicited by the reading of the answer referred to:

MESSRS. EDITORS—I am well aware that imitation wines are now extensively made in the State of New-Jersey from the juice of the apple, and more from the Harrison apple than from any other variety, and the most of it is made at Newark. Those *knowing* ones are correct with regard to its being a mixture of poisonous drugs not fit for the human stomach.

Having been in the horticultural business for over forty years I have had an eye single to those spurious wines from the juice of the apple.

It is gratifying to me to think that when you come to taste and test my wine—which I send you accompanying this letter—you will find a wine, a pure article, free from all drugs, and not an imitation. The sample I send you is eighteen months old, and made after the following process:

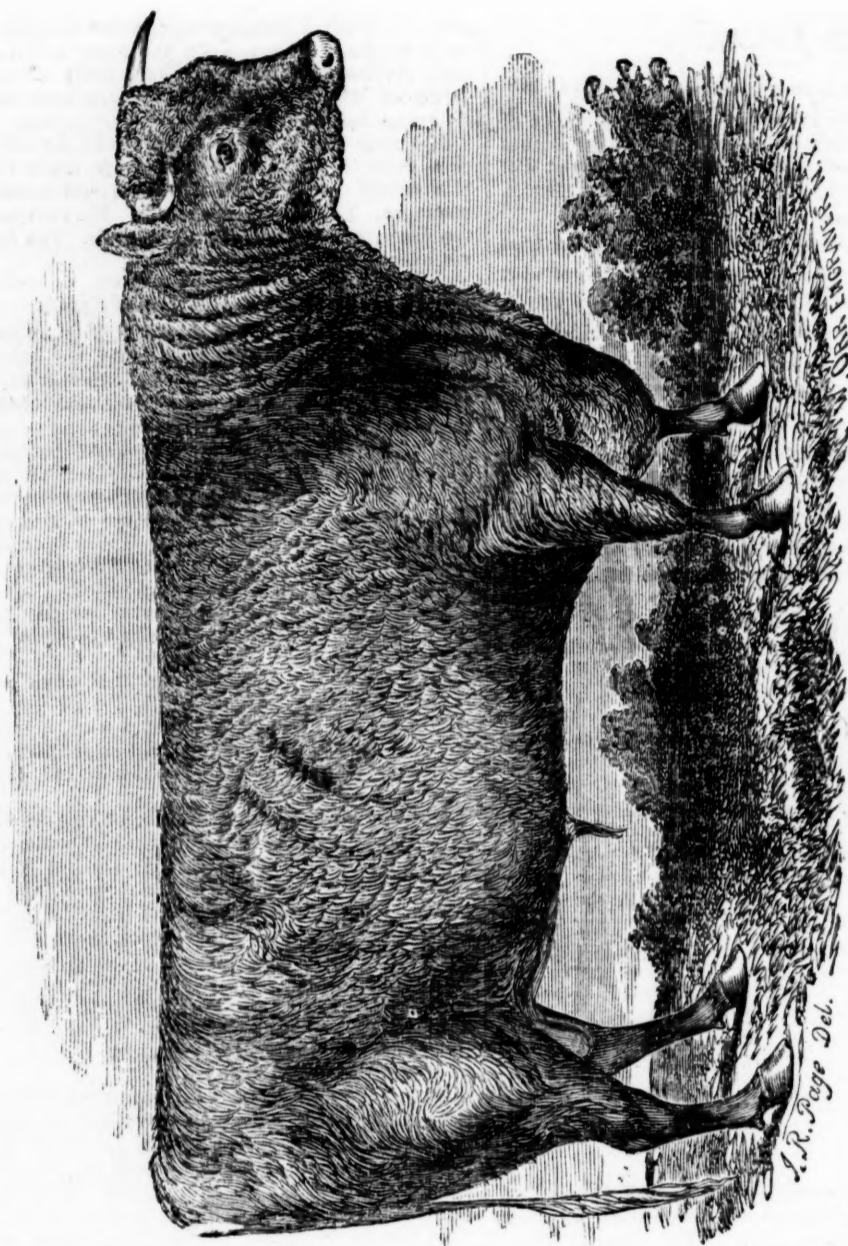
Take pure cider made from sound ripe apples as it runs from the press. Put 60 pounds of common brown sugar into 15 gallons of the cider and let it dissolve, then put the mixture into a clean barrel, and fill the barrel up to within two gallons of being full with clean cider; put the cask in a cool place, leaving the bung out for 48 hours; then put in the bung, with a small vent, until fermentation wholly ceases, and bung up tight, and in one year the wine will be fit for use. This wine requires no racking, the longer it stands upon the lees the better. STERNE BRONSON. *Elkhart, Ind., April, 1856.*

It will be observed that our correspondent has, for the benefit of all concerned, described the method of making pure cider wine, and it is for us to say something regarding the sample he sent us. It is a good cider wine, the best we ever tasted. If it had any fault, it consisted in being a very little too sweet. This can be remedied by using less sugar than the above named amount. A barrel of cider contains 31 gallons. Wine from currants can be made in the same manner exactly.—*Scientific American.*

Currants for Wine Making.

The red currant (or red Dutch) for wine making, gives a higher flavor than the white, and is considered a better producer. One acre of currant bushes, set 4 feet apart, would in due time produce 25 bushels of fruit, and might be made to grow 50 bushels, that depending on the soil and the manner of cultivation. Three gallons may be obtained from a bushel of good ripe fruit. Make the wine in the same manner that you would a barrel of good sweet cider, with the addition of from 3 to 4 pounds sugar to the gallon, fermenting off the pomace until it is entirely clear, after which it should be racked off into tight barrels and there remain any desirable time to become ripe and firm. As to the price of the article in market, the deponent saith not.—*Rural New-Yorker.*

FOWLER & WELLS' HAND MILL—An Ohio correspondent, in answer to the inquiry of W. F. B., informs us that he bought one of these mills, and that he was greatly disappointed in its work. Indeed he condemns it in toto, and says it is unfit for the purpose intended.



Devon Bull "Comet," (162.

Imported in 1851. For pedigree, see Davy's Herd Book, page 144, Vol. 2. Winner of the first prize for imported Devon.

Bulls at the Connecticut State Fair in 1855—the property of Linsley Brothers, West Meriden, Conn.

Feeding Ewes and Lambs.

FRIEND TUCKER—In looking over the last year of the Country Gentleman, which I have just got bound in one vol., I find in the No. for April 5th, an inquiry as to the best food for ewes and lambs during winter, the inquirer, Wm. E. WHEELER, supposing he lost several by feeding on potatoes, &c.

As I have had some experience for the last two winters with ewes, and find my results to differ so widely from those obtained by him, I am inclined to believe some other cause than the one mentioned will have to be sought in order to account for our different success.

In the winter of 1855, I kept 12 ewes, one of which died in the early part of the winter before dropping her lamb; the other eleven raised 18 fine lambs, not one having died. The past winter I had 28 ewes, which now have 37 lambs, viz. 19 of them one each, and 9 two each. One ewe lost a twin lamb during the severe cold.

This winter they began to drop their lambs in the first month, and about half the lambs are now ready for the butcher.

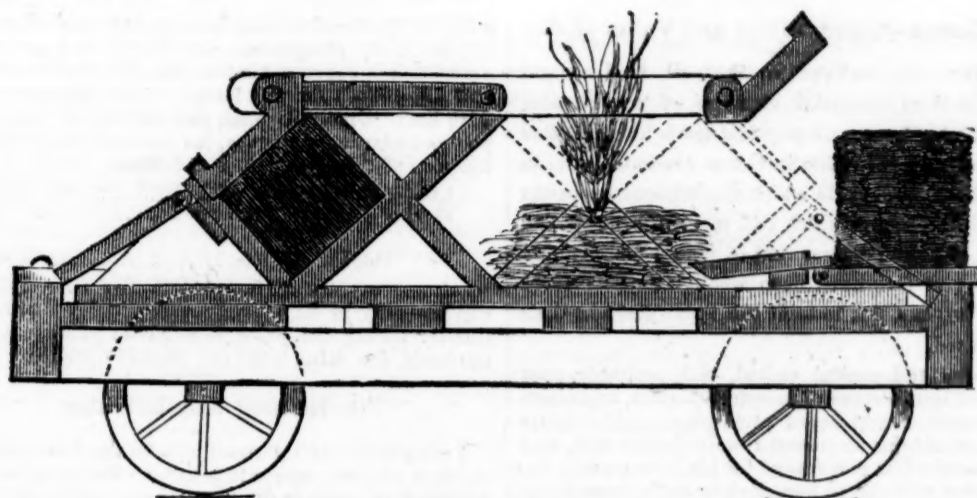
Their food was as much clover hay as they would eat, without allowing them to waste any: and a feed of corn and oats mixed, in the evening, till they began to lamb, when a feed of chopped potatoes, with a little meal, made of equal parts of corn and oats, was given in the morning. Fresh water twice a day.

I gave them but little salt during the winter, as they did not seem to desire it, but now when on grass, they inform me every two or three days that there is still a want unsatisfied. The lambs eating it with even more avidity than the old sheep.

They have been kept confined in a pen entirely under cover and sheltered from the wind nearly the whole winter in consequence of the severity of the weather, and are yet put up at night, and fed with as much corn and oats as they will eat.

I have been thus minute in stating the treatment of my sheep in order that others may escape the inconvenience of looking for an evil in the wrong direction.

D. EVANS. Willistown, Chester Co., Penn., 5 mo. 9.



Patent Portable Hay and Cotton Press.

Invented by P. MANNY of Waddam's Grove, Ill., and patented April 17, 1855.

Being a horizontal vibrating lever press, constructed on wheels, is readily drawn from place to place, and worked with great facility—the bale being hooped at one end, while the press is being filled at the other, and vice versa, pressing a bale at each vibration of the levers, and, as is apparent, capable of doing a greater amount of work, and designed to fully meet the wants of the public.

Notes from New-Hampshire.

The Rape Plant.

In the Co. Gent. of 3d Jan., is published some account of my experiments in the cultivation of the rape plant. I am doubtful about the fall sown plants surviving our winters. If they will not, they cannot be profitably grown here for the manufacture of oil from the seed. But I think the plant is worthy of extensive cultivation as green forage for cows during the usually dry autumns we experience. I shall sow the seed this year at different times, say in May, June and August.

I placed in my cellar last autumn, some half a dozen of the stumps from which the tops had been cut. They are now in a flourishing condition, and probably will produce abundance of seed. But I think I ought to have saved the perfect, or uncut plants for seed, rather than the stumps.

Winter Wheat in New Hampshire.

"Man and boy" I have lived—well, its no matter how long, but will say about fifty years, more or less, and I never saw a field of winter wheat till the summer of 1853. The previous summer (1852,) a son of one of our farmers was in Western New-York. On his return, he brought in his valise, thirteen quarts of White Flint winter wheat. This was sown on one third of an acre of "pine plain land." The land was in corn in 1851—oats 1852—in consequence of severe drouth, a light crop. Some weeks after the oats were harvested the land was covered with a dense growth of Roman wormwood and barn grass. About the 10th of Sept. there was applied to one third of an acre seven loads of compost manure; the compost, weeds and stubble, were all turned under by the use of a good plow. The 13 quarts of seed sown, &c.; producing the next season sixteen bushels of prime wheat—at the rate of 48 bushels per acre. The crop was readily disposed of at \$3 per bushel for seed—the yield of which, the next year was generally satisfactory, although somewhat lessened by the early and severe drouth of that season. A much greater amount was sown in the fall of 1854. The yield was good. The earliness of ripening, put the grain a-head of the weevils and the straw beyond the reach of rust, that is so injurious to the late ripening spring wheat.

Last autumn there was a still larger breadth of land sown with wheat. It comes out this spring bright, and now is looking splendidly, and I think it will compare favorably with the wheat of the west or any other wheat-growing section of the country. Six years ago, our farmers would as soon thought of attempting to grow the lemon and orange, as winter wheat.

Different Varieties of Foreign Wheat from Pat. Office.

In the Co. Gent. of 20th Dec. I gave a short sketch of several varieties of winter wheat received from Patent Office. The wheat was sown in drills, 18 inches distant, 11 rods long; land sloping to the east; rather poor, light, gravelly soil, dressed with guano, at the time of sowing the seed, about the 20th of Sept., (at least three weeks too late.) I had several papers of the Algerian Flint wheat from the province of Oran. This variety has a remarkably large berry, rather dark-colored, and weighing 70 lbs. to a bushel. I sowed three drills, making 33 rods in length. I think this variety appeared the most promising last fall, but nearly the whole of it is winter-killed, though recently a few dozen plants appear to have some vitality in them. The drill next north of the Algerian, I think,* is the early Noë wheat from France. This is the best looking kind in the lot, although two other varieties appear nearly as well. Two other sorts have about half the plants destroyed.

If I am correct in regard to the Early Noë, I think it must prove the best variety of the lot. Says the Patent Office Report—"This variety has the property of ripening some days before the common sorts; if it succeeds in our climate in this respect, a great point will be obtained. A single week thus gained in ripening, would often secure the crop from injury by the fly or rust, aside from the advantages to be acquired from an early market." I may further advise you respecting these several kinds of wheat after harvest.

French Prunes.

About one year ago, I received prune scions from the Patent Office. They were in bad condition when received; had quite a number of grafts set; only two lived, one of which grew five feet, the other two feet; winter-killed about half the length of each. They are now bursting their buds, and as they have survived the past trying winter, we may hope they will yet do well, even here in the Granite State. L. BARTLETT.

* By some means I have mislaid the memorandum, made at the time of sowing, but shall probably come across it soon.

Fish-Manure—Composition and Value of, &c.

It is generally well-known that all dead animal matter contains manurial elements of considerable value. Both science and practical trials have testified to this fact. Nevertheless instances are to be found in cases without number, in which single carcasses or the refuse thereof, and in which still more, the blood and refuse of slaughter-houses and of places for cleaning and curing of fish, have been wholly unappropriated or nearly so, and left to taint the atmosphere in their neighborhood.

Chemistry and capital united, will, probably, soon put an end to this waste of manurial matter, and abate this nuisance of a polluted atmosphere. And while the chemist obtains an honest reward for his skill, and the capitalist a fair percentage for his investments, the agriculturist will also be benefited by an increased supply of the elements of fertility, and at rates, too, more likely to be reasonable as the supply approaches more nearly to the demand. All of these three classes have, for some time past, had their attention directed to fish and fish-offal as a source whence a valuable fertilizer might be obtained. Various plans have been proposed for the reduction of such matter to a concentrated and commercial form, most of which have been found either impracticable or have proved too expensive.

Whether or not the process adopted by Mr. HALLIDAY, at the manufactory near Providence, R. I., is free from these objections, and whether or not it can supply ammonia, phosphates and other fertilizing elements at as low a price as we can obtain them in other forms,—these questions are not yet determined with any degree of certainty. From the most recent advices we should infer that only one of the several plans which have been proposed and tried in Great Britain for preparing a concentrated manure from fish or fish-offal has as yet proved successful. Dr. ANDERSON, Chemist to the Highland and Ag. Society of Scotland, states that he has recently analysed a sample made by a patent process which is said to be simple and inexpensive; and should the manufacture yield, says Dr. A., "on the large scale a material of uniform quality, and equal to that I have examined, it will undoubtedly prove a very important addition to the list of ammoniacal manures." The sample examined by Dr. A. was in the form of a yellowish powder, in grains about the size of fine corn-meal, remarkably uniform in appearance, very dry, and almost devoid of smell. From the analysis made of it, Dr. A. says that there can be no doubt that, if fish-manure of an equally good quality can be produced, a large demand for it will soon be created. Its composition is:

Water,	8.00
Fatty matters,	7.20
Nitrogenous organic do.,	71.40
Phosphate of lime,	8.70
Alkaline Salts,	3.80
Silica,	0.84
	100.00
Nitrogen,	11.25
Equal to ammonia,	13.68
Phosphoric acid in the alkaline salts equal to 14.1 phosphate of lime,	0.65

The amounts of ammonia and phosphate of lime in this fish-manure, as shown in the above analysis, prove it to be a very valuable one. The following remarks on its money value will prove interesting to many of our readers. The currency used may be easily converted into U. S. currency, though we have given an approximation sufficient for all practical purposes.

The price of this manure, says Dr. ANDERSON, "may be estimated very readily, according to the mode employed for Peruvian guano, by taking the commercial value of each of its important manurial constituents as derived from other sources. The values usually

adopted by chemists have been at the rate of $\frac{1}{4}$ d. (1 $\frac{1}{2}$ ct.) per lb. for phosphates, and 6d. (12 cts.) per lb. for ammonia; or expressed in tons, £6 (\$30) for the former, and £56 (\$280) for the latter. (The English ton is 2240 lbs.) Upon this plan, and taking all the phosphates under one category, we estimate the value of 100 tons of the fish-manure as follows:

13.68 of ammonia at £56,	£766
10.11 of phosphate of lime at £6,	60

Value of 100 tons,

or almost exactly £8 5s. (\$41.25) per ton; and this will probably be its average value." By another estimate, taking the price of sulphate of ammonia as the basis, the value is \$9 15s. (\$48.75) per ton.

Tile-Making and Ditching.

I wish to obtain information as to the best tile machine in use, and where it is to be obtained, cost, and anything of interest relating thereto, which you may be able to give me. Our lands need draining, and freight and breakage from Albany is an effectual preventive to our people obtaining them from there. We have material in abundance—clay, labor and fuel. Can they be made profitably at Albany prices? and for how large a job at draining would it pay to obtain a ditch-digger, such as you describe in your "Annual Register?" I feel personally somewhat interested in the subject, and as Secretary of our State Board of Agriculture, am very anxious to do something to introduce thorough drainage where it is so much needed. S. L. GOODALE. *Saco, Maine, May 26.*

From information received, we have no doubt the present prices of tile afford a handsome profit, provided ready sales may be obtained. An extensive demand would no doubt reduce the price materially, as they are furnished much cheaper in England than here. Machines for making tile are manufactured by PRATT & BROTHERS, Canandaigua, N. Y., who will promptly furnish any desired information as to price, a point on which we are not informed.

If the land at Saco is tolerably free from stone, the ditch digger would doubtless prove a great saving of labor, as we have seen it cut with two horses and a man, at the rate of 75 rods per day, two and a half feet deep, in a hard clay soil and subsoil, where but few stones existed. The price of Pratt's Ditching Machine is \$150; and from the data here given, our correspondent can readily estimate the amount of work required to repay its purchase.

Cast-Iron Water Troughs.

MESSRS. EDITORS—I saw in the June no. of the Cultivator, an inquiry from A. B., a subscriber of Charlotte, Vt., for the best watering trough. I can inform your correspondent that I have had much experience in watering troughs of all kinds, made of pine logs, pine plank, rum hogsheads, and oil hogsheads, and I could find nothing but that would in a few years rot and leak, flowing with ice all around them in consequence thereof. The hoops will soon rot from an oil hogshead, and then your trough will leak. I finally bought, some twenty years ago, from the ashery given up in this place, three potash kettles, very cheap, and have used them ever since, and they are as good now as the day I bought them. One of them is by the roadside, with a fine large stream of aqueduct water, pure and cold, with a tin dipper hung to the post, to quench the thirst of the weary traveler. These have done so well, I three years ago wished for more troughs to supply all my cattle and sheep yards. I went to

Rutland, Vt., and Mr. Bowman, the agent of the Iron Foundry, cast me four oblong troughs which prove first rate—no leak, no trouble. I have seven iron troughs which can be seen by your correspondent if he will call. Water comes in by a lead pipe through the bottom of some, and over the sides of others—the refuse carried off the same way.

For a drain I have for fifteen years or more had one which has not been repaired, built by laying flat stone in the bottom of a ditch two feet wide, long side stone, covered with large flat stone, and first with inverted sod or straw to keep the dirt from filling the space, and then covered with dirt.

I would add that Mr. Bowman of Rutland, has cast me an iron sink for a farmer's back kitchen, and which is a valuable article. L. WILCOX. *Orwell, Vt.*

To Prevent Foxes Killing Lambs.

MESSRS. EDITORS—In answer to the inquiry made through the "C. G." a few weeks ago relative to protecting lambs from the depredation of foxes, I received the following from a friend in an adjoining town. You will perceive that I am at "liberty to make such use of it as I think proper," and as it differs so materially from the recommendation of "A Wool Grower," published in the last No. of the Co. Gent., I have concluded to send it to you for publication.

I would say that I have tried friend Eastman's remedy, and believe it has proved, thus far, perfectly effectual, while my nearest neighbor, who neglected for a few days to make use of the remedy, has had a portion of his lambs taken by the fox, and that too while within a few rods of his house. D. G. WILLIAMS. *East Dorset, Vt.*

DEAR SIR—In the Albany Cultivator for May, 1856, I find an inquiry headed 'Foxes killing Lambs,' from you. After stating the number of lambs destroyed by foxes, you ask, is there any remedy to prevent, short of destruction? I answer yes, and for the benefit of yourself and neighbors, I send you the remedy, hoping it may prove as efficacious with you as it has with me:

My practice has been to have my lambs come before I turned out to grass or at least four-fifths of them. On the day I turn out, I gather the lambs all into an inclosure. I then take a red woolen flannel string, say three-quarters of an inch wide, saturate it with sulphur and grease, give it a slack twist, and tie it around the lambs' neck. Thus I serve the whole, and turn them out until shearing, when I take the strings all off. By this simple remedy I have saved hundreds of dollars, and have never lost a lamb when I have practiced it. Prepare your sulphur and grease (lard is the best) beforehand, by melting and stirring together, and your strings from old worn out flannel.

As you may think me a little curious in recommending a red string, I will give my reasons for it. First, because it makes the flock look so uniform and pretty. 2d, because the fox does not pounce upon his prey like a hawk or eagle, but approaches, retreats, reapproaches, re-retreats, crouches, gambols and frolics about until his victim is off his guard, while he himself grows more emboldened, and at last leaps over his victim, and endeavors to catch the scent; the color of the string now attracts his eye; he examines, and loathes the smell, and gives up the lamb as a bad egg, and retires in despair, not casting one longing lingering look behind.

Before I close I will beg of you to spare the foxes, for I have considered them for many years a blessing instead of a curse to the farmer. A few years ago they were nearly exterminated from this section by the trappers, and the result was the increase of other vermin four-fold, especially woodchucks and skunks, scarcely a rod of our meadows but what showed traces of their depredations. Therefore let me say again, spare the foxes. DORSON EASTMAN. *East Rupert, Vt.*

On Training Colts.

A correspondent, whose favor is published at length in our weekly paper, after describing the manner in which he spoilt a "noble gelding," by his efforts to break him, by "machinery and according to rule," thus gives his later and wiser method:

And now here goes the other side. I have raised and broke some half a dozen colts. Let me remark, I am not a horse dealer (having never yet traded horses in my life,) or a horse breeder, but a dairyman and wool-grower, and have since the first experiment invariably followed the course I am now about to describe,—and which has proved entirely successful. I have never taken much pains to gentle a colt while it follows the dam—that is for the first 4 months; and all attempts at catching it by my workmen are strictly forbidden. If it will come near you, of course treat it with gentleness. The reason I do not allow it to be caught is this—I do not approve of meddling with any young animal till you have time to do it effectually, and this is not the case on my farm at the period before weaning. At the time of weaning, the colt is shut up in a roomy strong stable, and kept alone, with the best of treatment until its wild cravings for the dam are exhausted; a good halter of leather is placed on its head; and as a man is sufficiently strong to hold it, and as a short time answers to learn the lesson, he is quickly taught. Sometimes, if very stubborn it may be well to tie him to a post and leave him alone for half a day or even longer, when at the return of his groom he will manifest an absolute pleasure, and suffer himself to be led at will. As winter approaches, it is provided with a warm dry stall, not on the naked floor by any means, where he is tied by the halter, and led to and from the brook, and as much more as you please, and allowed to run at large in fine weather, and fed with a small daily allowance of oats and plenty of good hay during the first winter. In spring he is turned to pasture, and the second winter the range of the shed and coarse hay, straw, or the litter of the sheep-rack, makes up his fare, and until the winter before the colt is 3 years old, or as much older as you please; but when we are ready to break a colt, we place the halter on his head, which he has not, and never will forget, and then place him in a strong harness along with an old, strong, steady and true horse, and drive on the road far enough to weary it, say six or eight miles, or go on about your work on the farm. The loads must in all cases be such as the old horse can move with ease, and the colt along with it if necessary, and if you back, the old horse must do the backing also. I have found in all the colts I broken, that they will learn the bit and rein as soon as the collar and breach.

I have broken two of a race that are said to be almost universally vicious, and I have never used a biting harness at all save in the first instance, and never a whip but once since, and that in a case of obstinate stubbornness in a young colt of eight months, which could not be induced to move at all in the halter; and in this case a lesson of a short hour proved sufficient to remove objections to such a degree that it followed me readily into the kitchen, to the astonishment of all within. This was one of the vicious ones spoken of. I am now using on the farm as the principal team, a pair of colts not yet four years old; they are perfectly reliable, no whip being needed, and a careless observer would on seeing them work, never suspect they were so young. The only fear I have in the matter is that we shall work them too hard. One of these is of the race of intractables, and until it was tied in the stall and fed at the manger steadily for a long time, would on no account willingly suffer its nose to be handled, which made it unpleasant as it was with difficulty it could be haltered in the field. Kind treatment and patience have conquered, and its disposition is so far

modified as to be almost if not quite affectionate. How do you like this picture?

This is my experience in training colts. Let others do as they may, as for myself I am satisfied with both sides. Of the first, I had quite enough, and the memory of that transaction is attended with painful feelings of remorse. Of the last, in all the colts that have passed through my hands, not one has yet come to maturity, but has proved itself first rate. I know several that have been trained by jockeys, and not one of these but must learn the uses of the harness ere they are fit for anything but the lighter pleasure carriages or sleighs. E. B. H. Berlin Centre, N. Y.

We "like the above," and shall be pleased to receive the other articles alluded to.

Blood as a Fertilizer.

A company has recently been incorporated in England for the manufacture of what is called *The Patent Nitro-Phosphate or Blood Manure*. One good effect of the establishment of such a company may be this—that the attention of agriculturists shall be thereby more generally directed to the value of blood as a fertilizer. How seldom is any attempt made to save blood when animals are slaughtered either on the farmer's premises, or at slaughter-houses in villages. In the larger villages and cities the blood is very generally collected and sold to refiners of sugar and other classes of manufacturers. That blood is worth some little expenditure of care to save it we may infer from what chemists inform us as to its composition, the amount of nitrogen in fresh blood being generally set down as equal to 3 per cent. of ammonia, making it worth for this constituent alone about four cents per gallon, or \$8.00 per ton of 2000 lbs. The value of blood by this estimate is about seven times as great as that of good farm-yard manure. Of course, if one hundred pounds or pints of blood were received upon and absorbed by six hundred pounds of well-dried peaty or mucky matter, the resultant mixture would be equal to 700 lbs., or over one-third of a ton, of good farm-yard manure. Either in the fresh state or absorbed to saturation in muck, blood might be advantageously used in gardens and in fields in the neighborhood of villages.

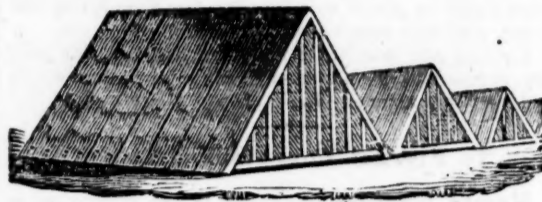
Butter Making in Winter.

MESSRS. TUCKER & SON—I see in the *Cultivator* an inquiry of "Why will not the butter come?" And as the answer you quoted from a back volume, is not satisfactory to me, for it does not produce the best possible article, I will give my experience of the best way I have found out to make butter in the winter. In the first place I want all the milk utensils perfectly sweet and clean, and the milk clean and free from dirt. Set the milk in a warm room, in pans; skim the milk as soon as it needs to be, and put the cream in a crock in a warm place to sour. The day before it is churned, heat up to 100°, or as warm as it can be without starting the oil, and set it back in its place till the next day, and then warm it up to 62° and churn. The butter will come in the course of an hour. I think to have it come in half an hour makes the best and the most butter. Work it just enough to get the buttermilk all out, but am very careful to not have the grain of the butter broken, for if the little golden globules are broken it makes the butter taste greasy. Use all the salt (after the milk is out) the butter will dissolve, which is one ounce to the lb. of the fine ground salt, (pure and good.) I think the strippings the Old Subscriber put in with his cream, was no help to make the butter come. Warming the cream was an experiment that we tried, and found that it improved the butter very much in taste and in color. I never use any coloring stuff in

my butter or cheese. I think the milk and cream, when properly manufactured, make the best color. I E. St. Lawrence Co., N. Y.

How to Make Hen Coops.

I would be much obliged if you, or one of your correspondents, would inform me through the columns of the *Country Gentleman*, as to the best method of constructing a hen-coop for raising young chickens. By so doing you will much oblige. R. K. Easton, Pa.



The coop represented above, was described and recommended by C. N. BEMENT, author of the "Poulterer's Companion," in the *Cultivator*, many years ago. We have found it to answer a good purpose.

It is made by nailing short pieces of boards together, in such a way as to form two legs of a triangle, the ground answering for the other side. These coops should be at least two feet in height, with one end boarded up tight, and the other secured by nailing strips of boards, or laths, in the form of a grate, leaving sufficient space between them for the free passage of the chicks, without affording liberty to the hen. In front, there should be a broad piece of board, as long as the coop is wide, on which to feed the chickens and hen. This board may be secured to the coop with leather or other hinges, so as to admit of being raised up and closing the coop, towards evening, which will not only answer the purpose of guarding the young brood against rats and other enemies during the night, but will prevent them from wandering about the next morning on the dew and wet grass before it is dry.

To Prevent Cows from Kicking.

MESSRS. EDITORS—One of the trials or vexations that dairymen have to be subject to, is kicking cows. From the removal of calves from their mothers, chapped teats, and bad dispositions, it may be safe to say that no dairymen gets through the milking season without encountering this annoyance. Any method therefore that will save the poor cows the cruel knockings, kickings, and hard names, that they frequently get on such occasions, or even the more moderate system of a "single blow, with time for reflection," as recommended in the "*Cultivator*," a few years ago, is at least worthy of trial.

Cattle are, in some respects, like some human beings; they will do more to gratify a bad disposition, than to comply with wholesome discipline; hence it will be found very difficult to find a remedy that will apply equally well in all cases. The following method will perhaps approach as near perfection in that respect as any that can well be hit upon. It has at least humanity to recommend it. Cause the cow to stand upon *three legs* during the operation of milking. This may be done by simply noosing a small cord around the fore foot, and bringing it up to the body, and wrapping the cord twice around the leg above the upper joint, and tucking the end under, or which will do about equally well, fasten the chain or tie rope to the manger or stanchion about two feet from the floor, and then hang the fore leg across that.

The next best method perhaps is the old English "cow tye," which is nothing more than a soft rope about 2 inches long, with a noose at one end and a wooden tie in the other. Wrap this around the slender part of the hind legs and cross it once or twice between, so as to make it lap tight, and it will generally, in a short time, make a cure. R.

United States Agricultural Society.

The Fourth Annual Exhibition of the United States Agricultural Society, will be held at Powelton, (Philadelphia,) on Tuesday, Wednesday, Thursday, Friday and Saturday, October 7th, 8th, 9th, 10th and 11th.

The First Exhibition of the Society, held at Springfield, Mass., in October, 1853, was devoted exclusively to an examination of Horses;—at Springfield, Ohio, 1854, Cattle alone, were exhibited; at Boston, 1855; all departments of Farm Stock,—Cattle, Horses, Sheep and Swine, were shown.

The Society, encouraged by past success, and by the approbation of the Agricultural community, now propose to offer Premiums, not only for Domestic Animals, but also for Poultry, and the products of the Fruit Garden, the Grain Field, and the Vineyard, and for Agricultural Implements and Machinery.

Premiums from Twenty-Five to Two Hundred Dollars, amounting in the aggregate to over Twelve Thousand Dollars, will be offered for the various classes of Domestic Animals, Fruits, American Wines, Vegetables, Grains, and Agricultural Implements and Machinery.

A local Committee of Forty Citizens of Philadelphia, representing the various branches of industry, has already been appointed to co-operate with the officers of the Society, in perfecting arrangements for the Exhibition; and Fifteen Thousand Dollars have been guaranteed to meet expenses. This material aid, coupled with the excellence of the selected location, and the large amount of Premiums offered, induces the expectation that the Exhibition of 1856, will be superior to any of its predecessors.

Favorable arrangements for the transportation of Stock and other articles, will be made with the various Railroads.

The List of Entries, the Awards of Premiums, and the Proceedings, will be published in the Journal of the Society for 1856.

The Premium List, with the Regulations and Programme of the Exhibition, will be furnished on application to Mr. JOHN MCGOWAN, Assistant Secretary of the United States Agricultural Society, 160 Chestnut Street, (Rooms of the Philadelphia Agricultural Society,) or by addressing the Secretary at Boston.

MARSHALL P. WILDER, *President.*

WILLIAM S. KING, *Secretary.*

Destruction of Trees by Mice.

The unparalleled destruction of fruit trees by mice the past winter, has not, we think, received the attention through the public journals, that a calamity of such magnitude demands. With the hope of drawing more attention to the subject, we publish the following extract of a private letter, written some weeks since, by a gentleman who has given large attention to the subject of market orcharding, and who has large plantations of fruit trees. We hope it may invite such examination as may lead to the discovery of some remedy.

MY DEAR SIR—Before seeing the Co. Gent. of this week, I supposed myself the only ruined man, orchard-wise. But on page 256 of Co. Gent., in an article I suppose written by you, I see that great destruction is suffered by others, as well. Full one-half of my fine young orchards have been completely destroyed by the mice—grass and plowed ground alike. Trees 6 inches in diameter, have suffered as badly as smaller ones. My pear orchard of near 1000 trees, is literally riddled, and I shall plant no more of them. Other casualties were bad enough to try all the patience and perseverance I had; but this mouse destruction has done me up. I had 2,500 fine young apple trees in nursery, which I calculated to plant out in 30

acres more of ground this spring. These are all gone. I don't believe I have fifty trees left out of the whole number, and I never saw finer ones than 1500 of them were—all the best kinds of worked apple.

What to do I don't know. To replant, and be served in the same way again, I can't think of. Here are eight years of labor, and solicitude, and my whole future years of expectation cut off at one fell swoop, besides the investment of capital in the purchase of the trees, and the cost of planting and tending them.

How badly off my neighbors are I don't yet know, but I hear that one of my neighbors has lost the most of his fine young peach and pear orchards. The sum of my losses I cannot state—but the dollars may be estimated by thousands! In fact I feel sick—disheartened from further trial in the fruit line. I could give a fearful bill of particulars, if I had time.

I know of no remedy that will save my trees. All the nostrums of the books and papers are worthless. I have tried them in a small way heretofore, but they are imperfect, and of doubtful efficacy. Many of my trees are girdled from root to branch where snow drifts covered them, and many are cut out at the root itself, where the mice burrowed like woodchucks. Nearly all my orchards had got into bearing, and had been planted from four to ten years.

I see also, on going into my timber lots, that the mice have made sad havoc with the young forest trees. All kinds alike appear to have been cut, from root to branch, where the snow piled around them. I never heard of such wholesale destruction before.

How so many mice came, is the wonder. The fields were full of them last fall. The season was wet—a heavy growth of grass followed, which gave them shelter, and they increased like grasshoppers. Even now every loose piece of turf and old sod is filled with them. Plowed fields appear to be as bad as the grass grounds. So that all precaution, as heretofore considered effective, has proved useless.

This calamity will prove a fertile text for deeper investigation than any previous experience that our pomologists have had, and I hope our nurserymen and others interested will canvass the subject through our public journals.

Disease in Poultry.

I have lost several valuable fowls lately, with a disease like the gapes in chickens. Some of them live a fortnight after being attacked, and some die in a few days. There seems to be stoppage in the breathing apparatus precisely like gapes in chickens. Do you know of any remedy? OTSEGO.

The inquiry above would have been noticed earlier had it not been mislaid. The description of the disease affecting our correspondent's poultry is not full enough to enable us to judge with certainty as to the treatment. Some of the symptoms are like the roup, while others are more like inflammation of the lungs. In either case, we should recommend that the diseased bird be immediately removed from the flock to a dry, warm, and well ventilated place. If the bird was ours we should give a tea-spoonful of castor-oil, or one and a half of flour of sulphur; then leave it to fast for one or two days; then feed sparingly for a few days of mashed boiled potatoes or of scalded oatmeal. If the bird did not soon amend, unless it was very valuable, we should kill it at once.

An Egg within an Egg.

A subscriber informs us that the abnormal egg mentioned in a late no. of this paper, is no very unusual thing. He says he has seen two within a few years. One was very large, and laid by a white Shanghai hen; the other was less than an ordinary egg in size, and laid by a Creole. Both of the inner eggs were perfect, but between the two shells only the white of an egg was found in either case.

Inquiries and Answers.

CEDAR BIRDS.—H. H. B. inquires in the last no. of the Country Gentleman, the best way to repel those "delicate looking rascals," the cedar birds, and states that shooting does not answer. He will find this remedy to succeed, if only applied perseveringly at the outset. Begin early in the morning and continue two or three hours, when they will probably leave for the day. They will return again probably, when the same process is to be repeated. They will not stand many assaults of the kind. We have generally found that an hour or two for a few mornings will drive them off for a long time—sometimes for a week, and sometimes for the entire season. At any event, the quickest way to get rid of them, is to keep up the attack, till some decided result is produced. Sometimes the destruction of a very few will frighten off hundreds.

HEAVES.—A correspondent inquires the best feed for heavy horses? I had one two years ago which was very bad. I commenced feeding the first of the winter, cut hay, wet and covered or mixed with what grain I thought he needed—a quantity of cob meal, or meal ground from corn in the cob, and he is now as well to appearance as ever. L. WILCOX. Orwell, Vt.

HOUSE LEEK OR LIVEFOREVER.—I wish to inquire the best method of destroying the house leek, by some called liveforever. A. D. J. [Spade the turf containing it, four to six inches deep, and throw the whole mass, tops, roots and all into the hog-pen. If any appears the next year treat it in the same way. If you have more ground covered by it than you can treat in this way, follow the example of a former correspondent of this paper, who says—"I had about three-quarters of an acre completely covered with it. In the autumn of 1852, I commenced by plowing as shallow as possible, or not more than 4 inches deep, laying the furrow as flat as possible so that it could be easily removed. I then carted and packed the turf in heaps about 6 feet wide, 4 feet high, and as long as was convenient, say about 4 rods, handling it carefully so as not to scatter the small fibres. I used salt and lime freely during the packing operation. In this way I have completely removed it from the soil, and I find on opening the heaps that the inside is completely destroyed, and suitable for top-dressing or mixing again with the soil."

HOW TO DESTROY QUACK GRASS.—How to destroy quack is the question? I hope this may be satisfactorily answered—that is, how to do it successfully, not forgetting to consult economy. I do not ask a learned disquisition upon "red top," nor "horse sorrel." The simple question is—quack roots and grass. I shall not trouble you nor your correspondents, for an elaborate essay on the fibrous formation of the "root," nor of the causes of its appearance unless it shall be necessary. How can it be destroyed the most certainly with the least labor and expense? If there are any patents extant to annihilate it, let me into the secret. Some labor-saving machine to eradicate it, root and branch, is much needed. G. Y. J. Dunnville, N. Y. [We once found a lot which came into our possession late in the spring, so filled with quack grass as to be unfit for cultivation. We plowed and harrowed thoroughly, and then raked the roots into heaps and burnt them. This process was repeated several times during the summer, and thus it was "eradicated root and branch." If any one has destroyed it "with less labor and expense," he will please communicate the process.]

FATAL DISEASE IN SHEEP.—I have lost many sheep the last year from the following disease: A swelling, commencing under the under jaw and running back to the neck; the sheep eats but little, gets poor, and finally dies. Sometimes the swelling is gone for a few

days; but I have never had one live long after having it once. If you or any of your subscribers can give a remedy, you will oblige at least ONE SUBSCRIBER. Rockaway, Morris Co., N. J.

BROADCAST SOWER—PORTABLE SAW MILLS.—Please answer through the Cultivator where Stevens' Broadcast Seed Sower is to be had. Give the name and address of the manufacturer. [Address W. S. SAMPSON, Boston, Mass.] Also where a two or three horse-power saw mill can be got, and the price. W. W. WILKIE. Ramsey, Can. [A two-horse power will cost \$116—portable circular saw mill, \$37—extra saw for splitting boards, &c., \$7—cross cut saw for cutting logs, \$25. They can be procured at the Ag. Warehouses in this city.]

BEE BOOKS.—Please inform me through the Co. Gent., what you consider to be the best work on the raising and management of bees for profit. I want a work which details all the recent improvements, inventions and discoveries pertaining to the hive and the apiary, and the habits and instincts of the bee. C. H. H. St. Louis, Mo. [There are several Bee-books, by Langstroth, Quinby, Minor, Weeks, and others. We cannot undertake to decide which is the best.]

GUANO ON GRASS LANDS.—I wish to know through *The Cultivator*, the experience of practical farmers, as to the results of the application of guano to grass. When is the best time to apply it, and what quantity per acre? Also, can it be applied with any certainty of success? Any information on the subject will confer a favor on one at least of your many readers. R. S. STODDARD. New-London Co., Ct. [We shall be glad to hear from any of our readers in answer to the above. In the mean time we may say, that for meadows guano should be mixed with several times its bulk of coal ashes, pulverized charcoal, or fine soil or muck, and applied on a wet day early in April, that it may have the benefit of the spring rains.]

ROOT'S PATENT CULTIVATOR.—We see an inquiry in your paper of May 15th, by a Canadian gentleman, about F. P. Root's Patent Three-wheel Cultivator. They are manufactured by Ganson, Huntley & Co., Brockport, Monroe Co., N. Y., who are sole owners of the Patent right. G. H.

CIDER MILLS.—P. F., Lachine, C. E.—You can get good portable cider mills at the agricultural warehouses in this city for \$40 to \$45.

DRAINING.—I have a field of several acres of good dry soil, excepting perhaps a quarter or half an acre, which is wet, and needs draining. The field has a gradual slope. Now where shall I drain it too? The wet place is completely surrounded by good dry soil. Also another field which needs draining, and is a dead level. Where shall I drain this too? The first field slopes regularly all one way. W. J. P. Lakeville, Ct.

FOXES KILLING LAMBS.—I have a remedy which has never failed for the last fifteen years in practice—to wit: Mix sulphur and lard, and rub it on freely about the necks of the lambs. One application is usually sufficient. A. B. WILCOX. Harpersfield, N. Y.

STUMP MACHINES.—Can you, or any of the readers of your valuable paper, inform me where stump machines are kept for sale—Stewart's Patent, or any on that principle. I am told western people buy them in New-York, but I can't find where. Information will oblige at least one of your subscribers. EDMUND ROSE. Delhi, N. Y. [We are not aware that stump pullers are any where kept manufactured for sale. You can see a model of Stewart's with Willis' improvement, at Saxton & Co.'s Ag. Book-store, 140 Fulton street, New-York, from which you can make one.]

Extracts from Correspondence.

HALF-BLOOD SILESIAN FLEECES.—I send you the weight of fleeces for four years, of some half Spanish and half Silesian sheep, which will speak well for the cross bloods.

Buck No. 16—1st fleece, 12 lbs. 8 oz.
 " " 2d do. 17 " 12 "
 " " 3d do. 22 " 13 months growth.
 " " 4th do. 20 "

Making.....72 lbs. 4 oz. in 4 years.

Ewe No. 33—1st fleece, 10 lbs. 8 oz.

" " 2d do. 10 "

" " 3d do. 10 " 4 "

" " 4th do. 9 " 12 "

Making.....40 lbs. 8 oz. in 4 years.

Ewe No. 28—1st fleece, 10 " 12 "

" " 2d do. 10 " 4 "

" " 3d do. 9 " 8 "

" " 4th do. 10 " 4 "

Making.....40 lbs. 8 oz. in 4 years.

The above are medium sized sheep, and the two ewes have raised three lambs each. GEO. CAMPBELL.
 West Westminster, Vt., May 30, 1856.

THE WINTER, &C., IN OREGON.—Extract of a letter from a subscriber, dated St. Helens, Columbia county, March 29, 1856—"I have been in Oregon over eight years, and we have had the hardest freeze the present winter during that time. The last of December and first January were quite cold, but no snow. The winter since has been mild and very pleasant, with very little rain. The wheat was generally killed by the freezing, but the farmers have sowed again, and the crop now looks well. The white wheat we sow here, will come good sowed from August to April. A great deal of damage has been done to young fruit trees by the winter, by killing them just below the collar where the top fiber appears. Out of two hundred trees I have not lost one by the freeze. They were all well mulched with partly rotted hay and straw during last summer. Those of my neighbors near by, that were not mulched, on the same kind of land, were badly killed. The peaches are in full bloom—also pear, cherry and plum; the apple is beginning to show red clusters of fruit buds. The grass is a foot high in many places. Last year the peach trees bloomed in February. We have a kind of wild currant here in Oregon that blooms in February or March, and is the handsomest bush I have ever seen. The flowers are very numerous, and remain a long time on the bush; they are of a deep pink color, one of which I send you in this letter; the fruit is of no use, being very sweet and musky, something like the common black currant. The bush grows ten or twelve feet high, and is very hardy. I think that they will do well in any of the states as far north as New-York. When the berries are ripe I will send you some of the seed. JOSEPH MERRILL."

We shall be glad to receive the seeds. Judging from the flowers received, this wild currant must be a very beautiful shrub.

THE OSAGE ORANGE.—This winter has been a hard trial upon the Osage Orange. In some places the side branches have been killed. I have heard of some hedges being seriously injured by the extreme cold weather; but as far as I have observed, it is in fine order, and making luxuriant growth this spring. I think Downing remarks that this plant will not sprout from the cuttings of the roots. Accidentally I have seen the facts which he discredited. Some root cuttings were left partially covered with moist earth, and in a little time they sprouted. Upon examination I found that the end of the cutting was dry and hard, but just at the surface of the ground the root had swelled, and the bark cracked, so that the sprouts came through, presenting a singular appearance. In others, where the end of the cutting was below the surface, branches had pushed from between the bark and wood.

These root cuttings were in a very moist place. The hedge is being planted by the mile in all this region, and when fully grown and in its summer dress of dark glossy green foliage, is a great ornament to the farm. It requires constant attention, however, and hence is not a suitable fence for the unthrifty. E. S. LIPPITT.
 Cincinnati, O.

MIDDLEFIELD, MASS.—In noticing last week the sale of cattle by Mr. Thorne, you did but partial justice to the enterprising farmers of Middlefield, Mass. In addition to the purchase of 'Roan Duke,' by Mr. ELDRIDGE PEASE, for \$500, Mr. HARLOW LOVELAND of the same town, has recently purchased of Isaac N. Deforest, Esq., of Dutchess Co., the beautiful Devon bull 'Winchester,' which took the first prize at the last National Fair. He was purchased at the low price of \$500. LAWRENCE SMITH, Esq., of the same town, has added largely to his flock of New Oxfordshire sheep, including a very superior buck which has taken first prizes at County, State, and National Fairs, and is said to be one of the best in the country. Mr. Smith has now probably the best flock of mutton sheep in the State. It is composed of purchases made annually during the past four years, from the well-known flock of John T. Andrew, Esq., of West Cornwall, Ct. Thus in the classes of Durham and Devon cattle, and mutton sheep, the farmers of Middlefield have within their reach some of the very best blood in the State, and it is to be hoped they will have the good sense to secure the full advantage of its rapid dissemination. A. D.

Rare Phenomena.

MESSRS. EDITORS—As I am a subscriber to the Country Gentleman, I see some strange things noticed there, and as this seems to be a most singular year with us, particularly in presenting most unheard of phenomenon in parturition, I send you the following. A neighbor of mine, Mr. RAILEY, had a mare that had a horse colt and a mule colt at the same time, (same foal.) Again, Mr. Moss had a mare that had a mule colt, and in about five weeks she had another. Another—Mr. Railey had a mare that was sick. In physicking her, they caused her to lose her colt, which was in February, and in the spring she had another. Now, gentlemen, if you or any of your subscribers can give any more unusual cases, I would like to see them, through your paper. J. W. N. Woodford Co., Ky., May 20.

Cure for Wens.

MESSRS. EDITORS—I will give you a cure for wens on cattle. I had a valuable cow, which had a wen on the jaw as large as a common sized tea-cup when I commenced treatment. My remedy is to bathe the wen thoroughly once in twenty-four hours with fine salt and cider vinegar. Put in as much salt as will dissolve. This remedy thoroughly cured my cow in three weeks JOHN DRAKE. Delaware, N. Y.

Hens Do not Turn their Eggs.

I noticed in the last number of *The Cultivator*, a recipe for keeping eggs, viz.: Packing in small boxes, to be turned once in twenty-four hours; and the writer concludes, by saying that the process is a very natural one, and consequently good, as the hens themselves are in the habit of turning their eggs once a day while hatching. Now I must beg to differ in opinion from the gentleman, as far as regards this habit of the hen, which I think is a mistake. I have paid strict attention to the rearing of fowls, for four years, but have never observed a hen turning her eggs, and have talked with other fowl breeders, but have never seen a person who had observed such a habit in their fowls. R. B. Plattsburgh, N. Y.

Notes for the Month.

THE FAIR GROUNDS AT WATERTOWN.—The President and Secretary of our State Ag. Society, have visited Watertown, at the request of the Local Committee, to examine the grounds prepared for the accommodation of the Society, and selected a lot in the bounds of the village, containing thirty acres; a fine grove of eight acres was included in the portion selected for the Fair Grounds. The Grounds can be reached from the center of the village, and from the railroads, very readily—side-walks extending to the Grounds—abundance of water from the mains from the water works which passes the Grounds, affording an abundant supply of water—the committee consider the grounds admirably adapted to the purpose; and from the known liberality and taste of the citizens of Watertown, they will, doubtless, be arranged in a manner equal, if not superior, to any heretofore occupied by the Society.

CASHMERE GOATS.—We are under obligations to R. C. FOSTER, Esq., of Nashville, Tenn., for samples of the wool from Cashmere Goats from the flock of Mr. WILLIAMSON of Sumner county, Tenn., who Mr. F. informs us has about thirty of these goats. The wool or hair, as we suppose it may more properly be called, is a beautiful soft and silky article, from ten to twelve inches in length. We should be glad to have the history of this flock, the amount of produce, &c.

U. S. AG. SOCIETY.—We have received the Journal of the U. S. Ag. Society, Part I, for 1856. It is occupied solely with the doings of the Society at its annual meeting at Washington in January last, including the Annual Address of President WILDER, the Papers read at the meeting by D. J. BROWNE, Esq., of the Patent Office, Capt. VAN VLEIT of the U. S. Army, Prof. BAIRD, Mr. T. GLOVER, Dr. EASTER, and others.

ALBANY CO. AG. SOCIETY.—A meeting of the Board of Directors was held in this city last week, when G. I. VAN ALLEN was appointed Secretary, vice CHARLES R. WOOLLEY, deceased, and Dr. P. B. NOXON of Watervleit, a Director, vice D. D. T. MORE, resigned. The 23d, 24th and 25th days of September next were selected as the time for holding the next Annual Fair, and a committee appointed to procure from the Common Council of this city the Washington Parade Ground as the place for holding the same.

NEW-JERSEY STATE FAIR.—This Fair, it will be remembered, is to be held at Newark, Sept. 9—12, and spirited efforts are making to get it up in the best manner, and to make it creditable to the intelligent farmers of that State, and no doubt all our New-Jersey readers will be prepared to aid the exhibition by presenting more or less of the products of their skill. We see by the Premium List just received, that inducements are offered to exhibitors from other States, by the offer of liberal prizes on Stock of all kinds.

WHAT HAS BEEN DONE ON ONE ACRE.—Some of our readers who cultivate only a small patch of land, as some do in and near villages, may take some hints from the following statement which is a summary of the management of an acre by the editor of the Maine Cultivator, several years ago. From one-third of an acre in corn he usually got thirty bushels of sound produce, besides some soft or refuse. This might serve for family use and for one or two hogs besides. From the same ground he got 200 pumpkins and beans for the whole year. From a bed of six rods square he usually got sixty bushels of onions and with the amount bought his flour. The rest of the ground was appropriated to potatoes, beets, parsnips, cabbage, green corn, peas, beans, cucumbers, melons, squashes, &c., with

fifty or sixty bushels of beets and carrots for the winter food of a cow. Then he had also a flower garden; gooseberry, raspberry, and currant bushes; and a few choice apple, pear, plum, cherry, peach, and quince trees. Now if an acre can be made to produce so much in Maine—almost enough for all the necessary supplies of one family—why may not the same thing be done elsewhere?

SHIPMENT OF CATTLE, &c., TO THE UNITED STATES.—The ship Leona, Capt. Norris, which left Liverpool on the 23d of April, for Philadelphia, had on board 24 head of Short-Horn cattle—a celebrated bay entire horse, "Lord Raglan," a descendant of Beeswing—a lot of South Down sheep, and some valuable dogs. Among the cattle are several belonging to Mr. THORNE, of Dutchess. The rest of the cattle and the other animals belong, we believe, to Messrs. MARSHALL and SMOOT of Kentucky.

WINDHAM Co. (Ct.) AG. SOCIETY.—Some friend has sent us the excellent Address, by Rev. Dr. VINTON of Boston, at the last Fair of this Society, together with the Prize List for this year's Fair, which is to be held at Brooklyn, Sept. 17 and 18. We hope Dr. Vinton's Address has been extensively distributed and thoroughly read by the farmers of Windham.

THE SHEEP SHOW AT PENN-YAN.—We have not received the list of prizes awarded at this exhibition, as we expected. The *Yates County Chronicle* of last week, says—"The Fair of the Wool Grower's Association, which was held in this place last week, was pretty largely attended during the first and second days, but not so largely on the third and last day, owing to inclement weather. The display of sheep was very fine, particularly of the fine-wooled variety. Probably there was never before so good a collection of first class sheep, put on exhibition in this country. We understand the number was twice as large as was exhibited at Bath last year. All the arrangements for the Exhibition, and the care of stock, &c., were first rate. The buck which carried the Sweepstakes Premium of \$60, was purchased by MILES G. RAPALEE, of Milo, for \$300. His pedigree is given by Mr. WOOSTER, by whom he was exhibited, as follows: "He was sired by my celebrated Buck, Matchless, raised by E. HAMMOND, Esq., of Middlebury, Vt., and for which I paid \$300 when a lamb. This Buck was sheared the 24th of May last, his fleece weighing 20 pounds 8 oz., of unwashed wool. He will shear the present time about 23 or 24 pounds."

EXPERIENCES IN DRAINING.—JOHN A. HOPKINS, Esq., who works a fine farm of 160 acres, a few miles north of Buffalo, informed us during a recent call, that he had tried draining with tile on 25 or 30 acres thoroughly or in part, and with the best results. He deserves much credit for his enterprise as shown in this and other experiments. Mr. MASON, of the firm of Manly & Mason, whose "Oaklands" Green-houses at Buffalo, are probably among the most extensive and commodious in the country, has also, as we were informed, done much to bring wet and marshy portions of his Nursery grounds into a state of high fertility by judicious draining.

A NOTE FOR NATURALISTS.—We counted under the eaves of one of Mr. Hopkin's barns, no less than *seventy-two* nests of the common barn swallow, within a distance of perhaps 40 feet, all apparently inhabited—a fact remarkably illustrative of the gregarious habits of this bird.

SKILFUL POULTRY BREEDING.—Mrs. Hopkins raised last year from *five* turkeys, broods numbering in all no less than *ninety-five*—a fecundity no less noteworthy than profitable, the income at a dollar each being a larger return from a similar expense than could be obtained in most farming speculations. Who can beat this?

THE AMERICAN GRAPE GROWER'S GUIDE—being a practical Treatise on the Cultivation of the Grape Vine, in each department of the Hot-House, Cold Grapery, retarding house, and out-door culture. By WILLIAM CHORLTON, author of the "Cold Grapery," &c. New-York; Saxton & Co.

This is an enlargement and improvement of the author's former treatise entitled "The Cold Grapery," which was a valuable work from its simple and plain description of the management of a cold house, derived from ample and successful experience. It now contains 170 pages, and is illustrated with a number of engravings. Those who wish clear, plain, and straightforward directions how to manage their grape-vines, in all the different modes of culture, will find this just the book they want.

THE SOUTH, CAROLINA AGRICULTURIST.—We have received the first number of this journal. It is to be published monthly at Columbia, by the S. C. State Ag. Society, at \$1 a year. It is edited by our old friend, Col. A. G. SUMMER, who we are sure will make it worthy of the liberal support which we trust it will receive.

AN ANCIENT AUTHORITY.—Mr. WAINWRIGHT of Dutchess Co. has in his possession a copy of a very early work on English Agriculture. It was printed in London over two hundred years ago, in 1652, the palmy days of Protector CROMWELL, to whom it is dedicated in an appropriately humble and flattering address of some pages. Its title page is headed "*Vire la Republic*," and is as follows:—"THE ENGLISH IMPROVER IMPROVED, or the Survey of Husbandry Surveyed. Discovering the Improvableness of all Lands: Some to be under a double and Treble, others under a Five or Six Fould. And many under a Tenn Fould, yea some under a Twenty fould Improvement. By WALTER BLYTHE, a lover of Ingenuity." The above is enclosed within a border coarsely engraved upon copper, representing the days when swords shall be beaten into pruning hooks, by various artistic designs which we have not room to describe. It faces a second title-page, which is more full, and conveys a tolerable idea of what "Peeces of Improvement" the author especially recommends. The reader will gather from them that the best systems of the present day are not quite as new as might be supposed, while Mr. W. especially called our attention to a caution in the body of the work, against *quack Agricultural chemists*, quite as forcible now, as the day it was written. We quote the second page alluded to:—"All clearly demonstrated from Principles of Reason, Ingenuity, and late but most real experiences; and held forth at an Inconsiderable charge to the Profits accruing thereby, under SIX PEECES OF IMPROVEMENT.

- "1. By Floating and Watering such Land as lieth capable thereof.
- "2. By Draining Fen, Reducing Bog, and Regaining Sea Lands.
- "3. By such Enclosures as prevents Depopulation and advanceth all Interests.
- "4. By Tillage of some Land lost for want of, and Pasturing other destroyed by Plowing.
- "5. By a discovery of all Soyls and Composts with their nature and use.
- "6. By doubling the growth of Wood by a new Plantation.

"*The Third Impression much Augmented.* With an Additional Discovery of Severall Tooles and Instruments in their Forms and Figures promised. *With a second part; containing SIX NEWER PEECES of Improvement.* 1. Our English Husbandring Claver, and St. Foyn as high as may be. 2. The facilitating the charge and burden of the Plough, with divers figures thereof. 3. The planting Welde, Woade and Madder, three rich commodities for Dyers. 4. The Planting of Hops, Suffron and Liquorish, with their Advance. 5. The Planting of Rape, Cole seed, Hemp, and Flax,

and the profit thereof. 6. The great advance of Land by divers Orchard and Garden Fruits. *The Experimenting whereof makes good the Improvement promised.*"

DEVON CATTLE.—R. H. VAN RENSSELAER, Esq. of Morris, Otsego Co., one of the oldest and most reliable breeders of Devons in this state, has issued a Catalogue of pure-bred Herd-book North Devon Cattle, which he has for sale, which may be seen at this office or which may be obtained by addressing Mr. V. R. at Morris.

SHORT-HORNS FOR MASSACHUSETTS.—Mr. THORNE of Dutchess county, has recently sold two fine bull calves to go to Massachusetts—one, "Roan Duke," from Cornelia by Grand Duke, to ELDRIDGE PEASE of Middlefield—the other, "Marquis," from Myrtle by Squire Gwynne 2d, to GEORGE CRANE of Chester.

GRAND DUKE BULL.—JAMES B. CLAY, Esq. of Ashland, near Lexington, Ky., has recently purchased the yearling bull "Royal Duke," of Mr. SAMUEL THORNE, Thornedale, Dutchess county. Royal Duke was bred by Mr. Thorne—red, calved Oct. 29, 1854—got by imported bull Grand Duke—dam imported cow Frederica, whose portrait was published in the Co. Gent. of 10th Jan. last.

MORE SHORT-HORN SALES.—We learn that Judge SHELDON, of Sennett, N. Y., has sold to S. P. CHAPMAN, Esq., of Mount Pleasant Farm, Clockville, Madison Co., N. Y., his two cows, 'Lucia 4th,' and 'Red Lilly.' These cows are said to be very superior specimens of the Short-Horn, and were the choice of the Judge's entire herd. They were purchased at a high figure, and we are credibly informed that they make a fine show among the Mount Pleasant herd. (See Mr. Chapman's advertisement of Short-Horn bull calves.)

HORSE EXHIBITION AT LYONS.—The *Lyons Republican* of the 6th, says—"The elements are against the Exhibition, but it will be successful. Great numbers of superior horses are entered, and more will be this forenoon, unless the weather should be too unfavorable. Our village is filled with strangers from all parts of the State."

THE MICHIGAN OR DOUBLE PLOW.—S. W. writes us that one of these plows has stood a whole year or more in front of a country store in one of the western states, ticketed "For Sale, Cheap," without finding a single farmer disposed to make trial of it. He states that the merchant, with whom the plow was left for sale, tells of a great many queer, sneering, and would-be-witty remarks and inquiries which different persons have made in regard to it, while he cannot recollect of hearing any remark or inquiry which betokened an unprejudiced mind, or one really desirous of information or disposed to be fair and candid in its judgments. S. W., however, is one of a different stamp, and really desirous of ascertaining what those who have tried this plow think of it. We shall be glad to give a place in our columns to any who having tried this plow for a season or two, shall send us a statement of his experience with it. Such information derived from experience will be sure to benefit, not one only, but a great many of our readers. Meanwhile we will furnish S. W. and others with some of the more useful items of information in regard to this plow, taken from an article which lately appeared in the *Granite Farmer*, giving the experience of one who has tried it.

Mr. D. M. SARGENT, the writer of the article referred to, states that he has used the Michigan or double plow for two years, with gratifying results. That used by him was manufactured by Prouty & Mears, Boston. He confesses to having had some qualms when he went to the depot after his plow, caused, we presume by fears that his purchase might prove a humbug, and expose him to the laughter of his neighbors. He says it very completely covers up all grass and weeds, and

thus very materially lessens the work of after cultivation. In fact they get so thoroughly buried that they cannot become at all troublesome. In order to have a plow of this kind work to the best advantage, he says that "the width and depth of the furrow slice should be nearly equal, the forward plow never exceeding two inches in depth, while the other may run to any required depth. It will run a little wider than it does in depth, however, as, for example, ten inches deep eleven or twelve wide; "but it will not work well with any more difference."

Mr. S. thinks the Michigan the best for use in New-Hampshire, (for deep plowing he means, we presume,) and the next best the Diamond furrow plow, which does its work better than any other *single* plow he ever saw, and which needs, he thinks, only to have the small forward plow of the Michigan double to make it a perfect article.

LIMESTONE WATER FOR IRRIGATION.—The *Virginia Farmer*, alluding to the discussion on the effects of limestone water in irrigation in the Country Gentleman, says—"One writer contends that the calcareous tufa will be deposited on the surface of the land in so close a crust as to smother the vegetation. We wish that writer would go to Rockbridge, Va., and see our grandfather's meadow which has been irrigated with limestone water and not plowed, for 40 years, and instead of a desert of calcareous tufa, he will see a soil which cannot be bought for \$100 an acre, covered with such a sward as would do honor to Orange Co., New-York. Our best lands are those which have been irrigated longest with our highly charged limestone streams."

GEO. W. GREGG'S CATTLE SALE.—We chanced to be present at this sale, which took place at Circleville, O., June 5th. The prices realized were considered fair, the animals generally meritorious. Among them was one imported cow 'Raspberry,'—which, however, (for \$800) and three of the best of the other cows (for \$300 each) were bid off by Mr. Gregg, who had reserved the right of making four open bids. Several bull calves found no demand. The prices realized ranged, on many of the cows, from \$35 to \$85, while 'Pink,' from 'Isaac' imported, brought \$120, buyer Thos. Huston; 'Fanny,' by Belvidere, \$130, buyer Mr. Dunn; 'Madaline,' \$150, buyer Mr. Cronse, we think, of Loraine Co., and 'Rose Bud,' from Raspberry, by Isaac, went to R. G. Corwin for \$250. The bull 'Noble,' brought \$255, from Mr. Dunn, and two young bulls were sold for \$150 and \$100 respectively. Making an average for ten cows, aside from Mr. Gregg's bids, of about \$100 each. We believe Mr. G. purposes going on as a breeder, with a renewed and perhaps a somewhat improved herd—in which line we wish him all success.

WINTER WHEAT IN NEW-HAMPSHIRE.—Extract of a letter from LEVI BARTLETT, Esq., of Warner: "Upon farther inquiry, I find the amount of winter wheat sown here last autumn, was much larger than I thought for. Over 40 bushels of seed was sown in one small school district. In others, nearly as much—nearly all of which is looking finely. Should it do as well as it now promises, we may set it down as a fact that we can grow winter wheat in New-Hampshire as well as they can "out West."

SPRING EXHIBITION OF THE CINCINNATI HORT. SOCIETY.—We reached Cincinnati a second time, just in season for a call at this show before its close. Cut flowers after a week's display could but be rather faded in glory. Pot plants, though not present in large numbers or great variety, included a number of remarkably fine specimens. Messrs. WM. HEAVER, JOHN SAYERS and others, whose names we did not ascertain, were among the largest exhibitors of these. We have not seen the list of premiums awarded, except on fruits. There was considerable feeling in respect to the decision of the Strawberry prizes, between Hovey's and

western seedlings. The "Grand Sweep-stakes" was awarded to four quarts of Hovey's over all others, John C. Youtcy, exhibitor—a decision considered a triumph by one party, but by no means quietly acquiesced in by the other. Two special premiums were awarded F. G. Carey, respectively for the best two quarts of Longworth's Prolific and of McAvoy's Superior. The premium for the best six varieties was awarded to W. E. Mears, for Hovey's Seedling, Longworth's Prolific, Genesee, Washington, McAvoy's Superior, and Monroe Scarlet. T. V. Peticolas of Mr. Carmel, received the premium for the second best six also for finely preserved apples.

THE CHERRY-BIRD.—If your correspondent H. H. B., will procure saplings a few feet taller than his cherry trees, and remove all the branches from them except a few at the top, and shorten those to about one foot in length, and secure a sapling through each tree, as near the center as possible, having the sapling project about three feet above the top of the tree, he will be able to shoot the cherry birds without injury to his trees. But I hope he will not shoot either the robins or the woodpeckers, as I think the insects they destroy more than a compensation for the cherries they eat. L. A.

DISTANCE FOR APPLE TREES IN NURSERY.—Last fall I planted some pomace with the intention of raising a nursery. I wish to know how far the rows should be apart and how far apart in the row. J. H. B. *Newton, Ct.* [If for a nursery of apple trees, as we suppose our correspondent intends, the trees should be planted in rows four feet apart, and the trees 8 inches to one foot in the row. If the trees are for setting in orchards when 6 or 7 feet high, 8 inches, or even 6 inches, will not be too near in the row; but if they are to remain till 8 or 10 feet high, the distance should be at least one foot.]

ANGOLA RABBITS.—Will you have the kindness to inform me where I can get a pair of the pure French Angola Rabbits, and the price. By so doing you will much oblige. W. L. T. [Any person having them will address W. L. THAYER, Newburgh, N. Y., with the desired information.]

POLAND HENS.—Can you inform me where I can purchase a good pair of Black Poland hens? Doubtless some of your subscribers have them. W. R. H. [We presume you can get them of Wm. Hurst at the Alms-house, or of E. E. Platt or E. A. Wendell, or half a dozen others, in this city.]

A PREMIUM CROP OF HAY.—The reports which were prevalent a year or two ago, about twenty ton crops of hay from one acre, in Great Britain and Italy, passed the *very utmost limits* of credibility. When we were subsequently told that the acre was one-fourth larger than the English or statute acre, or 1 27-100 acre, that the grass was Italian rye-grass, that the land was dressed often with liquid manure, that in this way and by the natural humidity of the climate, the growth was so luxuriant as to admit of seven or eight cuttings in the course of a year, as on the irrigated meadows of Lombardy, and that the hay itself had never been weighed but only estimated from the weight of grass on a certain proportion of an acre—then our incredulity and surprise were moderated to a certain extent. From some of the remarks which were called forth by the reports alluded to, we are disposed to think that if any farmer were to assert that he had obtained four and a half tons of hay from an acre in any of our Northern, Middle, or Western States, he would be suspected of "stretching it" a little. That this has been done, however, we learn from a late No. of the *Ohio Farmer*, in which it is stated that the premium crop of hay last year, in Summit county, was raised by D. E. FENN, of Talmadge, and the yield per acre amounted to 4 tons and 1,315 lbs. of timothy and red-top.

State Shows, 1856.

New-Jersey.....	Newark.....	Sept. 9-12.
Vermont.....	Burlington.....	Sept. 9 to 12.
Canada East.....	Three Rivers.....	Sept. 16-18.
Virginia.....	Wheeling Island,..	Sept. 17-19.
Ohio.....	Cleveland.....	Sept. 23, 24, 25, 26.
Canada West.....	Kingsion.....	Sept. 23-26.
Am. Pom. Society.....	Rochester.....	Sept. 24-30.
Michigan.....	Detroit.....	Sep. 30 & Oct. 1, 2, 3.
New York.....	Watertown.....	Sep. 30 & Oct. 1, 2, 3.
Illinois.....	Alton.....	Sep. 30 & Oct. 1, 2, 3.
Pennsylvania.....	Pittsburgh.....	Sept. 30 to Oct. 2.
Kentucky.....	Paris.....	Sept. 30 to Oct. 5.
National Ag. Show, Philadelphia.....		Oct. 7.
California.....	San Jose.....	Oct. 7, 8, 9.
Wisconsin.....	Milwaukee.....	Oct. 8 to 10.
New Hampshire.....		Oct. 8, 9, 10.
Iowa.....	Muscatine.....	Oct. 9-10.
North Carolina.....	Raleigh.....	Oct. 14-17.
Georgia.....	Atlanta.....	Oct. 20-25.
Indiana.....	Indianapolis.....	Oct. 20-25.
Maine.....		Oct. 28-30.
Alabama.....	Montgomery.....	Nov. 11-14.

Butter Making in Winter.

MESSRS. EDITORS—I noticed in the Cultivator for March, the complaint of an "Old Subscriber," that his butter did not come—also the reply in the May number, by a "Saratoga Farmer," who says that he has no difficulty in having butter come—"sweet, rich looking butter, that does not look like the old fashioned winter butter exhibited in our shops." Now that is just the kind of butter we make, without heating the milk either; he heats his, and does not allow it to freeze. I think the secret lies in the temperature, and not in the heating. Our buttery is a movable one, made of two upright boards, a little wider at the bottom than at the top, (for comeliness sake,)—cut at the bottom like a swallow's tail, that it may stand firm. Then they are connected by parallel shelves of suitable width, on which to set the pans of milk, of about six feet long, from within two feet of the floor to the top; but no higher than can pass through any door in the house. Then in the coldest weather this set of shelves is moved into the warmest room in the house. In coldest weather the pans are set on the topmost shelves to take the rising heat, and on the lower shelves in moderate weather, or moved into a cooler room as the case may require, so that at all times, except in extreme warm weather, the cream will roll up and churn like that in June; and if it is not as sweet, it is good enough for an epicurean. The temperature, and not the churn or cow, is in the fault, although there is a preference in cows and churns, and some will make more butter than others of the same cream. This frame may be made nice, and painted, so that it will not disgrace a farmer's parlor; and if it does not look well beside the piano, then hang a curtain before it. JOHN BRIDGMAN. Northampton, Mass.

SELF-HOLDING PLOW.—Last week we saw in operation on the farm of Mr. Lyon, on Saltonstall street, a new plow, that if generally introduced, will save many an aching pair of arms. It is the invention of Mr. Binkerhoof, of Batavia, who was superintending its operation. It differs but little from some other plows now in use, but with the addition of a guiding wheel about two and a half feet in diameter which runs in the furrow, and guides the plow, gauging the width of the furrow, while another wheel of less diameter supports the plow on the opposite side. The grounds plowed were a stiff sod with a heavy clay subsoil, and which would try the merits of the machine most effectually, yet it did its work perfectly, with no assistance from the driver except on turning at the ends. This plow was introduced here by Dr. Crawford, who has used the plow on his own farm, and who is prepared to answer all questions about it.—*Ontario Times*.



The WATER-CURE JOURNAL—devoted to Physiology, Hydropathy, and the Laws of Life and Health—with Engravings illustrating the Human System—A Guide to Health and Longevity. Published monthly at \$1.00 a year, by

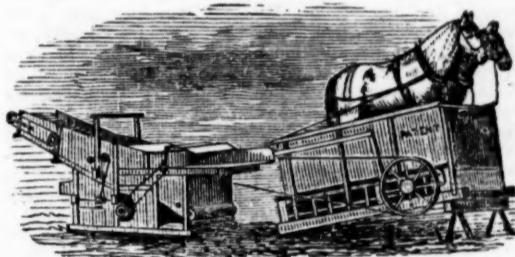
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GOOD HEALTH IS OUR GREAT WANT.—We can obtain it only by a knowledge of the Laws of Life and the Causes of Disease. All subjects connected with Diet, Exercise, Bathing, Cleanliness, Ventilation, Dwellings, Clothing, Occupation, etc., are clearly presented in the WATER-CURE JOURNAL. Hydropathy is fully explained and applied to all known diseases. Water-Cure is not equaled by any other mode of treatment in those complaints peculiar to Women. Particular directions are given for the treatment of ordinary cases at HOME, so that all may apply it. The JOURNAL is designed for the "People." Believing Health to be the basis of all happiness, we rely on the friends of good Health to place a copy of THE WATER-CURE JOURNAL in every family in the United States. Single Copy, \$1.00 a year; Five Copies, \$4.00; Ten Copies, 7 00. Now is the time to subscribe. Please address FOWLER & WELLS, June 12—w4tm1t No. 308 Broadway, New-York.

FOR SALE,

THAT SPLENDID ISLAND in the river St. Lawrence, known as Hacey Island, situated in the town of Louisville, St. Lawrence Co., N. Y., 30 miles below Ogdensburg, containing 1868 acres of excellent land, adapted either for pasture or tillage. It is well known as the best grazing land in the county—100 acres are under cultivation, and well fenced, with 8 complete farm steadings, in addition to the Homestead on which there is a commodious dwelling, barn 160 by 40 feet, sheds 400 by 24, workshop, granary, &c., all in good repair. Also several large orchards, and a splendid hard-wood bush—no waste land. Terms—one-half down—remainder as agreed on. Apply to the proprietor, WILLIAM R. CROIL,

June 12—w2tm3t* Louisville, St. Lawrence Co., N. Y.



Schenectady Agricultural Works.

IN consequence of the increased demand for their Improved RAILWAY HORSE POWERS, THRASHERS AND SEPARATORS, Combined THRASHERS AND WINNERS, Circular SAWING MACHINES and CLOVER HULLERS,

The undersigned have purchased a large establishment in Schenectady, N. Y., and are now prepared by increased facilities to supply all orders from any part of the country promptly.

G. WESTINGHOUSE & CO.

Schenectady, March 6, 1856—w&mtf

Hay Presses ! Hay Presses !

DERICK'S CELEBRATED PARALLEL LEVER HAY PRESSES, Patented May 16th and June 9th, 1854, which are now being Shipped to all parts of the country, and are in every case giving the most decided satisfaction—made to bale from 100 to 500 lbs and sold for from \$100 to \$175. For Circulars with engravings and full explanatory description, apply personally or by mail to

DEERING & DICKSON,

Premium Agricultural Works, Albany, N. Y.

Dec. 27—w&mtf

Colombian Guano—Try it.

(From The June Number American Farmer, published in Baltimore.)

We call attention to the advertisement of the Philadelphia Guano Company, who have recently made a contract with the republic of Venezuela, by which they are authorized for a series of years, to export the guano from all the islands belonging to that government. As those islands are located in the Caribbean Sea, at a short distance—about 1900 miles—from our own shores, the cost of freight is comparatively trifling, and the article can therefore be furnished at very low rates, when compared with the price demanded for Peruvian Guano.

The guano islands embraced in the contract of this Company are numerous, and the character of the deposits to some extent varies in the proportion of organic matter, ammonia, and the phosphates they contain. They are all, however, as compared with the Peruvian, much richer in the phosphates, and less abundantly supplied with organic matter and ammonia. At present we understand the Company design importing only that quality designated by the Inspector, Mr. Reese, as Colombian Guano, which is by far the richest phosphatic guano ever yet discovered, containing more than three times the amount of phosphates found in the Peruvian, and much more than is found in bone dust, and Mexican Guano—Peruvian Guano rarely contains more than from 15 to 30 per cent. of the bone phosphate of lime, and the different brands of the Mexican Guano, as inspected at Baltimore, contain from 25 to 67 per cent. while the guano marked by the State Inspector Colombian letter A. contains Phosphoric Acid, equal to from 50 to 90 per cent. of Bone Phosphate of Lime, and the guano marked Colombian letter B. contains Phosphoric Acid equal to from 70 to 80 per cent. of Bone Phosphate of Lime.

Without entering into the discussion as to the comparative value of ammoniacal and phosphatic manures, no one pretends to doubt the real value of the latter, while some of the highest authorities among men of science, attribute the chief value of all guanoes to the phosphates they contain. Be this as it may, experience seems to have determined that the phosphatic manures are of more permanent duration, and that where they are less efficient as to the crop of wheat, they endure longer, and are more effective in the after growth clover and grasses. Those of course who adopt the views of Prof. Liebig, and other high authorities, as to the value of mineral manures, will readily admit the great superiority of Colombian Guano over other varieties, it being as stated in the U. S. Patent Office report for 1854, "by far the richest source of phosphoric acid for the farmer yet discovered," and in the words of Dr. Stewart, the "*Ne Plus Ultra* of Phosphatic Guanoes."

The virtues of bone dust as a permanent fertilizer are well understood, and the ordinary Mexican Guanoes have been extensively experimented with, and their value acknowledged. Whatever merits these manures possess, must exist in a high degree in Colombian Guano, on account of its superior richness in the leading fertilizing principle—the phosphates—common to them all.

The difficulty made as to these manures, that they are not soluble, and the consequent doubts and apprehensions of farmers who are convinced of the value of their main constituent, as to their availability in the production of crops, is worthy of consideration.

1. In the use of these manures it would seem, that ultimately, at any rate, if not immediately, the farmer must reap the benefit of their application. They furnish an indispensable ingredient of fertility, and necessary constituent of plants. If it is not in condition to furnish the food of plants at once, it is only held in reserve until brought under the influence of solvents, which sooner or later are sure to make it available. A very observant farmer has said to us within a few days, that he will defy any one to find a piece of bone in his soil, after the second or third year, from the time of application. He uses no acid or other solvent, and does not care to have the bones ground fine. And let it be remarked that while a quick return is more immediately profitable, a slower but certain return is much safer for the land.

2. The solubility of Phosphates greatly depends upon the mode in which they are prepared. From good bones finely ground a beneficial effect is almost always immediately derived. From Mexican Guano some benefit seems always to accrue during the first year after its application, as well as on succeeding crops.

3. Whatever justice or force there may be in the objection of insolubility as applied to bone dust and Mexican Guano, does not rest, it is contended, against the Colombian Guano. It is reduced to a fine powder by grinding, and is thus prepared perfectly for the action of any solvent which may exist in, or may find its way to the soil. But independent of this it is asserted that it contains so large an excess of free phosphoric acid, that a sufficient portion for the use of plants

during the first year after its application is rendered immediately soluble. This is questioned, and we give the authorities.

Dr. Stewart in his analysis states the per centage of phosphate of lime to be 77.49, and of free phosphoric acid 5.23, while latter substance he states would produce to each ton of 2,000 lbs., "215 lbs. of nascent soluble super-phosphates, besides 1550 lbs. of the common bone phosphates of other phosphatic Guanoes.

Dr. James R. Chilton, of New-York gives as the result of an analysis of a specimen recently submitted to him 74.87 per cent of neutral phosphate of Lime, with a little phosphate of magnesia, and 13.14 per cent of soluble phosphate of lime, with 6.67 of organic matter, with ammonia.

Dr. Hayes, of Boston, states that "it is in fact a kind of natural bi-phosphate of lime, by far the most valuable of any of those compounds yet discovered, when compared weight with weight."

Professor Jas. C. Booth, of Philadelphia, in the specimen he analysed found 74.35 of phosphate of lime and magnesia, and 9.60 of free Phosphoric acid, and he pronounces it "a remarkable substance, containing naturally 84 per cent of dry super-phosphate of lime." He also states that he would "prefer it greatly to any artificial super-phosphate, for any purpose to which the latter is applied."

On the other hand Dr. Piggot in his communication published in our No. of September last says, "strangely enough, the very erroneous opinion was quite commonly entertained, that the phosphoric acid in this hard enamelled rock, is combined with lime in proportion to form a super-phosphate," and after stating the results of his analysis, remarks:—"The most cursory inspection of these results, is sufficient to convince any one at all acquainted with Chemistry, that the lime cannot be united with phosphoric acid, to form a super-phosphate."

The analysis of Dr. Bickell, published some time after, if we mistake not, sustained the opinion of Dr. Piggot.

We confess that taking an "outside" view of the matter we are at a loss to understand how a soluble phosphate could accumulate in a region where, if accounts be true, "it never rains but it pours."

It is worthy of remark, however, in passing, that the highest authorities should be at variance on a question of fact which it seems to us there should be no difficulty in determining with absolute certainty.

We have thus set before our readers fairly this article of Colombian Guano, in its aspect as presented chemically. We do not on such a presentation only, however promising, recommend to farmers, an investment in this fertilizer. We have some practical results which give us strong hopes that it has very high value.

One farmer who is making several experiments instituted last fall, upon wheat, and whose judgment we entirely rely upon, says that these experiments thus far indicate a decided superiority of the Colombian over Peruvian Guano, upon soil where the Peruvian has been used with the usual success.

We hear of other cases of its apparent success, which leads us to anticipate that the best opinions of those who recommend it may be realized. And we would say to farmers now, that it would be very well worth their while to make trial of it on a small scale at once, and carefully. A few hundred pounds are sufficient for experiment, and will enable them to determine whether it will be likely to pay on the wheat crop in the Fall. Try it upon oats at the rate of 300 lbs per acre, and upon other crops at a somewhat large rate.

Price \$36 to \$40 per Ton. Every bag will have the following Brand:

COLUMBIAN GUANO,

IMPORTED BY THE

PHILA. GUANO CO.,

A. & A. A.

A. LONGETT, Agent, New-York.

Put up in Bags of 160 lbs. each.

For sale in lots to suit purchasers, by A. LONGETT,
34 Cliff-st., Corner of Fulton., New-York.
June 19—w2mt1t

PURE BRED STOCK

FOR SALE—Thorough Bred Durham Cattle, Pure Bred Spanish Sheep, French Sheep, Suffolk Pigs and Essex Pigs. Apply to J. S. GOE, Tippecanoe, 4½ miles east of Brownsville, Fayette Co., Pa. Jan. 1—w&m1y*

Devon Cows,

HEIFERS, and Bull Calves—pure blood—for sale by
Feb. 1—m1y. B. V. FRENCH, Braintree, Mass.

UNION AGRICULTURAL WAREHOUSE AND SEED STORE,

No. 23 Fulton Street, (near Fulton Market,) New-York.

THE undersigned having succeeded to the business for the Manufacture and Sale of Agricultural Implements and Machinery, heretofore conducted by Messrs. Ralph & Co., at No. 23 Fulton-st., intends to continue the same in all its branches, and is prepared to furnish goods of the best style and quality at low prices.

Machinery, or any articles in the line, manufactured to order, according to pattern, at short notice.

His facilities for manufacturing enable him to offer to Dealers and Farmers the following leading articles at low figures:

Hand and Power Corn Shellers,
Fan Mills,
Plows, Harrows, Cultivators,
Revolving Hay Rakes,
Spring Tooth Hay Rakes, (the best rake in use.)
Cast Iron Corn Mills for Hand or Power
Road Scrapers, Wheel Barrows,
Field and Garden Rollers,
Corn and Cotton Planters,
Post or Ground Augurs,
Hay, Straw and Stalk Cutters,
Wagons and Carts,
Vegetable or Root Cutters,
Sausage Cutters and Stuffers.

In connection with extensive farming operations, I have for some years past given much attention to the raising of thorough-bred SHORTHORN, NORTH DEVON and AYRSHIRE CATTLE, and other fine stock, and now offer the advantage of my knowledge and experience to persons desiring to purchase.

A. M. TREDWELL.

March 27—w5t&eow4t—m3t

Country Residence for Sale.

DELIGHTFULLY situated, one mile north of the village of Claverack, half a mile from the Hudson River Institute, and four miles from the city of Hudson; containing 37½ acres of good quality land. There are about 150 young trees of choice fruit, a fish pond, a never-failing spring between the house and barn, and a stream running through the farm. The buildings are almost new, and fences in good condition. Price \$4,500; terms of payment to accommodate purchaser; and possession given on the 1st of April next. Address the subscriber at Hudson, Columbia Co., N. Y.

May 29, 1856—w6tm2t*

JOHN MCKINSTRY.

NO. 1 PERUVIAN GUANO,

AT THE lowest market price.

Superphosphate of Lime,
Poudrette, manufactured by the Lodi Manufacturing Co.,
Plaster for Land purposes,
Charcoal Dust for Land purposes,
Bone Dust, Sawings, Turnings and Ground Bone,
Can now be obtained in large or small quantities at the

North River Agricultural Warehouse,
GRIFFING BROTHER & CO.,

Feb. 14—w&mtf

60 Cortlandt-St., New-York.

Green Mountain Morgan Stallion.

FOR SALE.—The subscriber offers for sale his beautiful Green Mountain Stallion, from the celebrated old Green Mountain Morgan of Royalston, Mass. He is 6 years old,—weighs 1000 lbs.—of a beautiful dark chestnut color—a fine figure, prompt action, and a superior roadster, combining in a marked degree all the characteristics of the celebrated Morgan stock. His colts stand deservedly high, and are among the best in this part of the country. To those wishing to improve their stock of horses by a mixture of a strain of the old Morgan blood, this opportunity offers a rare chance

JAS. P. UPHAM,

May 1—m3t

Claremont, N. H.

The Black Hawk Horse Raven,

WILL stand at the stable of the subscriber the coming season. This horse took the first prize at the Fair of the State Agricultural Society of Connecticut last fall, in the class of stallions of all work, seven years old and over. All of his colts (several in number,) competing for premiums at the State Fair were successful, which was also true at the Fair of the Litchfield County Agricultural Society, and of the Housatonic Agricultural Society, which is sufficient evidence of the value of his stock.

ROBBINS BATTELL,
Norfolk, Ct.

May 1—w1tm2t

FOR SALE CHEAP,

TO CLOSE a consignment, a large lot of
AGRICULTURAL IMPLEMENTS,
Consisting of Plows, Straw Cutters, Corn Shellers, Fan Mills, Seed Sowers, Garden Rollers, Churns, Horticultural Tools, &c., &c., at cost prices.

JOHN ALEXANDER,

May 15—w4tm2t

34 Cliff-st., (up stairs,) New-York.

AGRICULTURAL IMPLEMENTS,

WHOLESALE and retail—FIELD and GARDEN SEEDS, in small and large quantities—FRUIT and ORNAMENTAL TREES from the best nurseries in the country. Farmers and Merchants will find it to their advantage, to give us a call before purchasing, at the North River Agricultural Warehouse.

GRIFFING, BROTHER & CO.

Feb. 14—w&mtf

60 Cortlandt-St., New-York.

PORTABLE STEAM ENGINES,

For Farm and Mechanical Purposes.

A. N. WOOD & CO., Eaton, Madison Co., N. Y., are building, and keep on hand Portable Engines of different sizes, on Trucks or without.

PRESENT LIST OF PRICES. Weight.

2½ horse power,.....	\$225	1500
3 do	\$275	1800
4 do	\$340	2000
6 do	\$520	3500
8 do	\$680	4500
10 do	\$850	6000

Trucks with cast iron wheels, from \$20 to \$50 extra, ready to hitch the team on.

Circulars can be had by addressing us as above.

Jan. 31—wtf—May 22—mtf

A. N. WOOD & CO.

DEVON CATTLE.

THE subscriber's second ANNUAL CATALOGUE of DEVON CATTLE, bred entirely from stock of his own importation, is now ready. It contains full pedigrees of all the animals in his herd; of which he offers a number of very superior bulls and heifers for sale.

Also ESSEX PIGS, bred from the best importations.

Address,

C. S. WAINWRIGHT,

April 1—w&m6ms.

Rhinebeck, Dutchess Co., N. Y.

EXCELSIOR AGRICULTURAL WORKS ALBANY, N.Y.



"RICH^d H. PEASE.
PROPRIETOR.

"The Best, the Cheapest"

RAILWAY HORSE POWERS,

THRESHERS AND SEPARATORS,

Slitting and Cross-Cut Saw Mills,

CORN AND SEED PLANTERS,

Fanning Mills, Vegetable Cutters,

DOG POWERS,

HAY AND STALK CUTTERS,

FIELD AND GARDEN SEEDS.

Circulars, giving Prices and Warrantee, sent

by Mail to those that wish.

369 and 371 Broadway

ALBANY.



UNITED STATES AGRICULTURAL Warehouse and Seed Store.

MAYHER & CO., Nos. 195 and 197 Water Street, New-York, where may be found the largest and most complete assortment of

Agricultural and Horticultural Implements, FIELD AND GARDEN SEEDS,

ever offered for sale in the United States.

Among our collection may be found the following, viz:—
Plows of every size and kind ever made, comprising some 150 different patterns; also, the genuine Eagle D and F Plows, which have taken the premium wherever tried and tested.

Harrows, Geddes, Triangular, Scotch and Square of all sizes.

Cultivators, with Cast, Wrought Iron and Steel Teeth, of different kinds.

Straw Cutters of various patterns, for cutting Hay, Straw, and Corn Stalks

Fan Mills, of twenty different styles and sizes, for cleaning all sorts of Grain; also, Coffee Hand Mills, for cleaning and sorting Coffee; a prime article for the West India market.

Horse Powers and Threshers, for one, two, four and eight horses; we have the Railway Power and Sweep Power, of different kinds, with Threshers, Separators, and Cleaners attached.

Mowing Machines; Ketchum's celebrated Mower, that will mow and spread in a perfect manner, twelve acres of grass per day. Reaping Machines; McCormick's, Hussey's and other makers.

Churns; fifty different styles, among which is the "THERMOMETIC CHURN," which is considered to be the best in use

We have also Hall's celebrated eight horse power, and combined Thresher, Separator, and Cleaner, well suited to the California market. And in a word every article necessary for the Farm, Plantation, or Garden, may be found at the UNITED STATES AGRICULTURAL WAREHOUSE AND SEED STORE, No. 197 WATER STREET, NEW-YORK.

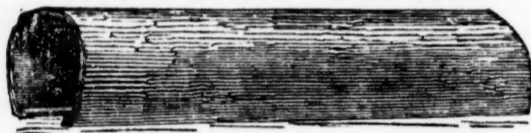
N. B. An illustrated catalogue will be furnished by addressing the subscribers as above. March 1—mtf

ALBANY TILE WORKS,

Corner of Patroon and Knox Streets, Albany, N. Y.

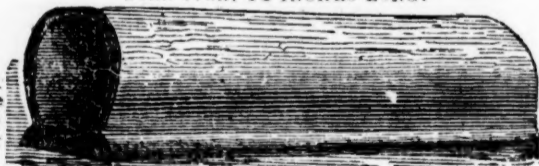
THE subscribers, being the most extensive manufacturers of Draining Tile in the United States, have on hand, in large or small quantities, for Land Draining, the following descriptions, warranted superior to any made in this country, hard burned. On orders for 10,000 or more, a small discount will be made.

HORSE SHOE TILE, 14 INCHES LONG.



PIECES.		
2½ inches calibre,	.....	\$12 per 1000
3½ " " "	.....	15 "
4½ " " "	.....	18 "
5½ " " "	.....	40 "
8 " " "	.....	80 "

SOLE TILE, 14 INCHES LONG.



PIECES.		
2 inches calibre,	.....	\$12 per 1000
3 " " "	.....	18 "
4 " " "	.....	40 "

Also on hand 6 inch calibre Octagon pipe, \$20 per 100, and 8 inch calibre Round pipe, \$30 per 100, for large drains—Cornice Brick, of the pattern used in the City of Washington, also on hand.

Orders respectfully solicited. Cartage free.

C. & W. McCAMMON,

Late BABCOCK & VAN VECHTEN,

May 8—w&m3ms. Albany, N. Y.

RICH'D H. PEASE, Agent,

Excelsior Agricultural Works, Warehouse and Seed Store, 359 & 371 Broadway, Albany, N. Y.

ATKINS' AUTOMATON:

OR,

SELF-RAKING REAPER AND MOWER. BEST MACHINE IN USE.

1 (the first) used in 1852.

40 used successfully in 1853.

300 in twenty different States in 1854.

1200 in all parts of the Union in 1855.

3000 building for the harvest of 1856.

THERE ARE SIX GOOD REASONS FOR THIS unparalleled increase and great popularity: 1st. It is strong and reliable, and easily managed. 2d. It saves the hard labor of raking. 3d. It saves at least another hand in binding. 4th. It saves shattering by the careful handling in raking; besides the straw being laid straight, it is well secured in the sheaf, and does not drop in the after handling, and the heads are not exposed in the stack, so that the GRAIN saving even exceeds the LABOR saving. 5th. It is a good Mower, being one of the best convertible machines in use. 6th. It has a knife that does not choke.

Its other excellencies, too numerous to mention here, are fairly given in the circulars. Its intrinsic worth is also attested by the award (mostly in only 3 years) of

OVER 70 FIRST PREMIUMS!

PRICE.—REAPER AND MOWER, \$200.—\$75 on its receipt, \$75 first September, and \$50 first December. Price of SELF-RAKING REAPER only \$175. Considerable saving in freight to those at a distance who order prior to 1st March; also liberal discounts for advance payment.

To procure a machine, order immediately. Though so little known the past season, and none ready for delivery till 1st of May, yet not two-thirds of the customers could be supplied. The reputation of the Machine is now widely established, so that THREE THOUSAND will not as nearly supply the demand as twelve hundred did last year, and we shall also be selling four months earlier.

Order early, if you would not be disappointed.

PAMPHLETS giving IMPARTIALLY the OPINIONS OF FARMERS, together with orders, notes, &c., mailed to applicants, and prepaid.

Write to us at CHICAGO, (Ill.), DAYTON, (Ohio), or BALTIMORE, (Md.), which ever is nearest you.

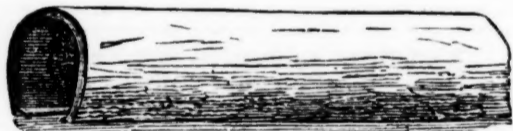
J. S. WRIGHT & CO.

"Prairie Farmer" Works, Chicago, March 6—w4tm4t

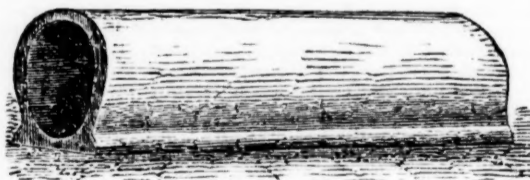
Archer & Co.'s Tile Works,

Near the Orphan Asylum, on the Western Plank Road—Office 63 Quay-street, near the Steam-boat Landing.

THE subscribers are prepared to furnish Drain Tile of all sizes and patterns at reduced prices, and warranted as good as any made in America—their length being 14 inches—(1000 will lay 76 rods of drain.) On a large order a liberal discount will be made.



Horse Shoe Tile—4½ inch calibre, \$18 per 1000—3½ inch, \$15 per 1000—2½ inch, \$12 per thousand.



Sole Tile—4 inch calibre, \$40 per 1000—3, \$18 per 1000—2, \$12 per 1000.

Also on hand Horse-Shoe Tile, suitable for small streams and out-houses, at \$8 per 100. Also large Tile, suitable for cellars, cisterns, sinks, &c., at \$4 and \$6 per hundred. Tile delivered at the docks and railroads free of cartage. Specimens can be seen at Clark & Gifford's, 39 Quay-st. Orders thankfully received and promptly attended to. Address

J. ARCHER & CO., Albany, N. Y.

DISSOLUTION.—The copartnership heretofore existing under the firm of Appleton & Alderson, is this day dissolved by mutual consent. Feb. 1st, 1856.

As usual, orders for Tile will be thankfully received by GEO. ALDERSON, Agent, Albany.

May 8—w&mif

Farm Lands for Sale.

THE ILLINOIS CENTRAL RAILROAD COMPANY
IS NOW PREPARED TO SELL OVER

Two Million of Acres of Farming Lands,
In Tracts of 40 Acres and upwards, on Long Credits and at Low Rates of Interest.

THESE lands were granted by the Government, to aid in the construction of this Railroad, and include some of the richest and most fertile Prairies in the State, interspersed here and there with magnificent groves of oak and other timber. The Road extends from Chicago, on the North-East, to Cairo at the South and from thence to Galena and Dunleith, in the North-west extreme of the State, and as all the lands lie within fifteen miles on each side of this Road, ready and cheap means are afforded by it for transporting the products of the lands to any of those points and from thence to Eastern and Southern markets. Moreover, the rapid growth of flourishing towns and villages along the line, and the great increase in population by immigration, etc., afford a substantial and growing home-demand for farm produce.

The soil is a dark, rich mould, from one to five feet in depth, is gently rolling and peculiarly fitted for grazing cattle and sheep, or the cultivation of wheat, Indian corn, etc.

Economy in cultivating and great productiveness are the well known characteristics of Illinois lands. Trees are not required to be cut down, stumps grubbed or stone picked off, as is generally the case in cultivating new land in the older States. The first crop of Indian corn, planted on the newly broken sod, usually repays the cost of plowing and fencing.

Wheat sown on the newly-turned sod is sure to yield very large profits. A man with a plow and two yoke of oxen will break one and a half to two acres per day. Contracts can be made for breaking, ready for corn or wheat, at from \$2 to 2 50 per acre. By judicious management, the land may be plowed and fenced the first, and under a high state of cultivation the second year.

Corn, grain, cattle, etc., will be forwarded at reasonable rates to Chicago, for the Eastern market, and to Cairo for the Southern. The larger yield on the cheap lands of Illinois over the high-priced lands in the Eastern and Middle States, is known to be much more than sufficient to pay the difference of transportation to the Eastern market.

Bituminous coal is mined at several points along the Road, and is a cheap and desirable fuel. It can be delivered at several points along the Road at \$1.50 to \$4.00 per ton; Wood can be had at the same rates per cord.

Those who think of settling in Iowa or Minnesota, should bear in mind, that lands there, of any value, along the water courses and for many miles inland, have been disposed of;—that for those located in the interior, there are no conveniences for transporting the produce to market, Railroads not having been introduced there. That to send the produce of these lands, one or two hundred miles by wagon to market, would cost much more than the expense of cultivating them; and hence, Government lands thus situated, at \$1.25 per acre, are not so good investments as the land of this company at the prices fixed.

The same remarks hold good in relation to the lands in Kansas and Nebraska, for although vacant lands may be found nearer the water courses, the distance to market is far greater, and every hundred miles the produce of those lands are carried either in wagons, or interrupted water communications, increases the expenses of transportation, which must be borne by the settlers, in the reduced price of their products; and to that extent precisely are the incomes from their farms, and of course on their investments, annually and every year reduced.

The great fertility of the lands now offered for sale by this company, and their consequent yield over those of the Eastern and Middle States, is much more than sufficient to pay the difference in cost of transportation, especially in view of the facilities furnished by this Road, and others with which it connects, the operations of which are not interrupted by the low water of summer, or the frost of winter.

PRICE AND TERMS OF PAYMENT.

The price will vary from \$5 to \$25, according to location, quality, etc. Contracts for Deeds may be made during the year 1856, stipulating the purchase money to be paid in five annual installments. The first to become due in two years from the date of contract, and the others annually thereafter. The last payment will become due at the end of the sixth year from the date of the contract.

Interest will be charged at only 3 per cent. per an.

As a security to the performance of the contract, the first two years' interest must be paid in advance, and it must be un-

derstood that at least one tenth of the land purchased shall yearly be brought under cultivation.

Twenty per cent. from the credit price will be deducted for cash. The company's construction bonds will be received as cash.

They will be 12 feet by 20 feet, divided into one living and three bed-rooms, and will cost complete set up on ground chosen anywhere along the Road, \$150 in cash, exclusive of transportation. Larger buildings may be contracted for at proportionate rates. The Company will forward all the materials for such buildings over their road promptly.

Special arrangements with dealers can be made to supply those purchasing the Company's lands with fencing materials, agricultural tools, and an outfit of provisions in any quantity, at the lowest wholesale prices.

Ready Framed Farm Buildings, which can be set up in a few days, can be obtained from responsible persons.

It is believed that the price, long credit, and low rate of interest, charged for these lands, will enable a man with a few hundred dollars in cash and ordinary industry, to make himself independent before all the purchase money becomes due. In the mean time, the rapid settlement of the country will probably have increased their value four or five fold. When required an experienced person will accompany applicants, to give information and aid in selecting lands.

Circulars, containing numerous instances of successful farming, signed by respectable and well-known farmers living in the neighborhood of the Railroad lands, throughout the State—also the cost of fencing, price of cattle, expense of harvesting, threshing, etc., by contract—or any other information—will be cheerfully given, on application, either personally or by letter, in English, French, or German, addressed to

JOHN WILSON,
Land Commissioner of the Illinois Central R. R. Co.
Office in the New Stone Passenger Depot, foot of South Water Street, Chicago, Ill. May 1—m6t

Appleton's Drain Tile Works,

Corner of Lydius and Snipe streets, Albany, near Mr. Wilson's Nursery.

HORSE SHOE TILE 14 INCHES LONG.



PIECES.

4 inches calibre, \$18 per 1000
3 inches calibre, 15 per 1000
2 inches calibre, 12 per 1000

SOLE TILE, 14 INCHES LONG.



PIECES.

4 inches calibre, at \$40 per 1000
3 inches calibre, at 18 per 1000
2 inches calibre, at 12 per 1000

THE subscriber having enlarged his works, is now prepared to furnish Drain Tile of the various patterns and prices. Also Large Tile for small streams and drains about dwellings, &c., at \$4, \$6, and \$8 per 100 pieces. He warrants his Tile to be perfectly sound, and to fit good at the joints, so as to admit water and keep out the dirt. The Tile have a larger calibre than any other of American manufacture for the same prices; they are also more than 14 inches in length—1000 pieces will lay 72 rods.

Tile delivered at the docks and railroads free of cartage. Specimens can be seen at L. & M. Merchant's, 71 Quay-st., Albany, near the Steamboat Landing.

Full directions for laying Tile will be sent free to those addressing the subscriber.

He would only add that tile from his establishment obtained the first prizes at the Albany County, and N. Y. State Fairs. Practical drainers furnished if required.

Orders from all parts, will be thankfully received and promptly attended to. Address JOHN APPLETON,
195 Washington-st., Albany, N. Y.

May 1—weowSt—m3m

Contents of this Number.

THE FARM.

A Day in Dutchess County,	201
Swamp Lands Reclaimed,	202
Agricultural Machines,	203
A Few Hours at Thornedale,	204
Grand-Island Farm, Mr. Allen's,	205
A Scioto Valley Letter,	207
Steam Engine for Farm Purposes, by J. A. HUMPHREYS,	210
Cut Feed Mixer, by H. V. WELTON,	211
Seeding Grass Lands, by M. J. PERKINS,	212
Green Crops as Fertilizers, by P.,	212
Curing Corn Fodder, by A. CHANDLER,	213
Notes from New-Hampshire, by LEVI BARTLETT,	217
Manny's Hay and Cotton Press,	217
Composition and Value of Fish Manure,	218
Tile-Making and Ditching,	218
Cast-Iron Water Troughs, by L. WILCOX,	218
Value of Blood as a Fertilizer,	220
United States Ag. Society,	221
Inquiries and Answers,	222
Extracts from Correspondence,	223
Notes for the Month,	224

THE GRAZIER.

Sheep Shearing at Mr. Chamberlain's,	201
Mr. Wainwright's Devons,	203
Mr. Thorne's Short-Horns and South-Downs,	204
Short-Horns of Ohio,	208
Worms in Horses, Remedy for,	214
Devon Bull Comet,	216
Feeding Ewes and Lambs, by D. EVANS,	216
To Prevent Foxes Killing Lambs, by D. EASTMAN,	219
On Training Colts, by E. B. H.,	219
Rare Phenomena, J. W. N.,	223
Cure for Wens, by JOHN DRAKE,	223

THE DAIRY.

Butter-Making in Winter, by E.,	220
To Prevent Cows from Kicking, by R.,	220

THE POULTRY-YARD.

Different Breeds of Poultry as Layers,	209
How to Make Hen Coops,	220
Disease in Poultry,	221
An Egg within an Egg,	221
Hens do not Turn their Eggs, by R. B.,	223

THE HORTICULTURIST.

Peaches in New-Hampshire, by L. BARTLETT,	203
The Apple-Tree Borer,	209
Raising Pear Seedlings,	209
Trees Injured by Mice,	209, 221
Horticultural Intelligence,	213
Mulching with Living Plants,	214
A Productive Tree,	214
French Prunes,	217

THE HOUSEWIFE.

Washing Clothes and Washing Machine,	215
To Make Pure Wine of Apples,	215
How to Make Currant Wine,	215

ILLUSTRATIONS.

Feeding Boxes for Sheep,	201
Lewis F. Allen's Farm Buildings,	206
Steam Engine for Farm Purposes,	210
Machine for Mixing Feed,	212
Washing Machine,	215
Devon Bull Comet,	216
Manny's Hay and Cotton Press,	217
Hen Coops,	220

Fairbanks' Hay Scales.

MORE than four thousand of these convenient and durable Scales have been put up by us in different parts of the United States and the British Provinces.

Several Gold and Silver Medals have been awarded to us by the various Agricultural Societies throughout the country, for

THE BEST HAY AND CATTLE SCALES;

and we have certificates without number from officers of city and village corporations, manufacturing establishments, and private individuals, who have our scales in use, testifying to their superior excellence.

To be in season for the coming hay crop, orders must be given early.

Scales set in any part of the United States or the Canadas by experienced workmen. Address by mail or otherwise,

FAIRBANKS & CO.,

June 5—w4tm2t

No. 186 Broadway, New-York.

A. LONGETT,

34 CLIFF-STREET, NEW-YORK.

PRICES OF FERTILIZERS FOR SUMMER 1856.

PERUVIAN GUANO, No. 1, with Government brand and weight on each bag,	per ton of 2,000 lbs., \$53.00
COLUMBIAN GUANO,	" 36 to 40.00
SUPERPHOSPHATE OF LIME,	" 45.00
BONE DUST, Ground,	per bbl., 2.50
" Turnings,	" 2.37 to 2.50
" Sawings,	" 3.00
" Mixed fine ground,	" 2.75 to 3.00
PLASTER OF PARIS,	" 1.00 to 1.25

There is an inferior grade of Peruvian guano which has the Government Brand on the bags—can be detected by the figure 2 under the weight mark.

A. LONGETT,

34 Cliff-St., Corner of Fulton,

June 12—w6tm2t

New-York.

THE EXCELSIOR CIDER-MILL,

"KRAUSER'S PATENT."

THE subscriber having tested this mill personally, during the past Fall and Winter, and ascertained from actual experience, where it was imperfect, has made several important improvements in the pressing arrangements, and now offers it to the public as the ONLY Cider-Mill that will perform the operation of grinding and pressing apples perfectly. Two good men can grind and press out from 6 to 8 barrels of cider in one day. The making of cider is only one of the advantages of this mill. Cheese and lard can be pressed with it, and we have sold several to people who say they have pressed their clothes dry instead of wringing them, which wears them out much quicker than the actual wear of the clothes, while the pressing does not wear them at all. The price of these machines is \$45 each, with a full warrantee. All orders and communications promptly answered by addressing

RICH'D H. PEASE,

May 29—w4tm1t

Albany, N. Y.

MANNY'S

COMBINED REAPER & MOWER

AND

Forbush's Combined Reaper and Mower,

For sale by GRIFFING, BROTHER & Co.,
May 29—w&m3m 60 Courtland-st., New-York City.

Willis' Patent Stump-Puller.

THIS is a Machine of vast power; and for extracting stumps, large or small, it has no equal. It will take out from 12 to 20 an hour, without difficulty, and with but a

SINGLE YOKE OF OXEN.

It is also the best Machine yet invented for
MOVING BUILDINGS.

All progressive men who desire to bring their waste lands at once into market, or a state of fertility, are invited to address or call on the patentee, WM. W. WILLIS, Orange, Mass., or John Reynolds, at C. M. Saxton & Co.'s, No. 140 Fulton-st., N. Y., where a working model may be seen, and other information obtained. June 12—w&mtf

RURAL PUBLICATIONS.

THE COUNTRY GENTLEMAN—THE CULTIVATOR, AND THE ILLUSTRATED ANNUAL REGISTER OF RURAL AFFAIRS—Published at Albany, N. Y., by LUTHER TUCKER & SON.

THE COUNTRY GENTLEMAN is a beautifully illustrated weekly of 16 pages quarto, with special Departments for The Farm, The Grazer, The Dairy, The Fruit Garden and Orchard, The Florist, The Kitchen Garden, The Poultry Yard, The Housewife, The Fireside, &c. "This is, without question, the BEST Agricultural Paper in the United States."—Hon. JOHN WENTWORTH, M. C. of Illinois. Price \$2 a year.

THE CULTIVATOR, monthly, 32 pages octavo—well-known for twenty years, as the best monthly agricultural journal in this country—price 50 cents per year.

THE ILLUSTRATED ANNUAL REGISTER OF RURAL AFFAIRS. The two Nos. issued for 1855 and 1856, contain more than 250 engravings of buildings, animals, trees, fruits, &c., &c. Price 25 cents each—sent post paid by mail.

